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CAMDS Auxiliary Input Tool (CIE)

User's Manual

Version 2.3

China Automotive Material Data System

Management Center

S/N	Version	Revised Date	Major Revised Content	Remarks
1	V1.0	2011/01/01		Established
2	V1.1	2011/05/01		Modify
3	V2.0	2011/11/04	Version upgrade (Add functions such as batch computing; Revise some pictures in the manual and so on.)	Modify
4	V2.3	2014/06/25	Version upgrade (Maintenance about measured recyclability rate and measured recoverability rate and basic data update and so on)	Modify
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Note: this version releases the altered content.

1 Purpose

This manual explains the input procedures and notes of CAMDS interface tool that has been in operation since January 1, 2011.
CATARC Standard Material Datasheet is hereinafter abbreviated as CAMDS interface tool.

2 What is CAMDS interface tool

CAMDS interface tool is made for the convenience of component enterprises to better match with CAMDS system. CAMDS interface tool Composed of MDS, check messages and entry skills, CATARC should be updated in a timely manner to obtain the latest Editor Excel sheet.

2.1 Sheet update

To get the latest version: contact with CATARC and download the latest version of software and relevant files from designated website.

2.2 Configuration performance

PC with the following configuration is required to handle CAMDS interface tool
CPU：Pentium II 350MHz or more
Memory：512 MB or above
HDD Volume: 100MB
OS: Windows XP or above
Excel: Excel 2003 or above
Information: when the PC configuration is unsatisfying and the memory space is scarce, PC performance slows down.

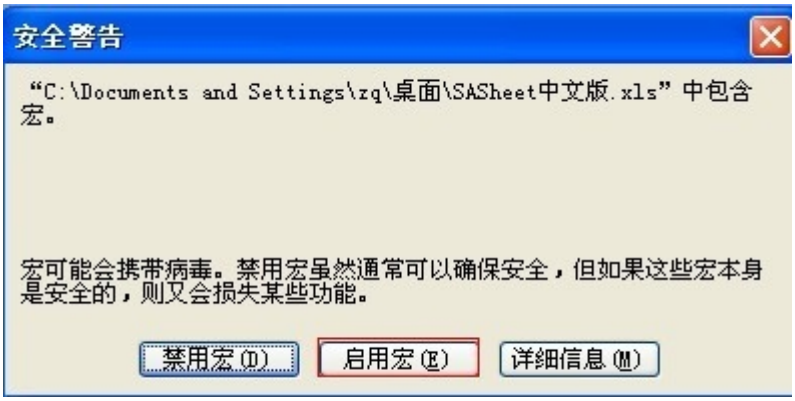
3 Illustration of Excel Input Procedures and Notes

3.1 Preparation of Editor Excel sheet

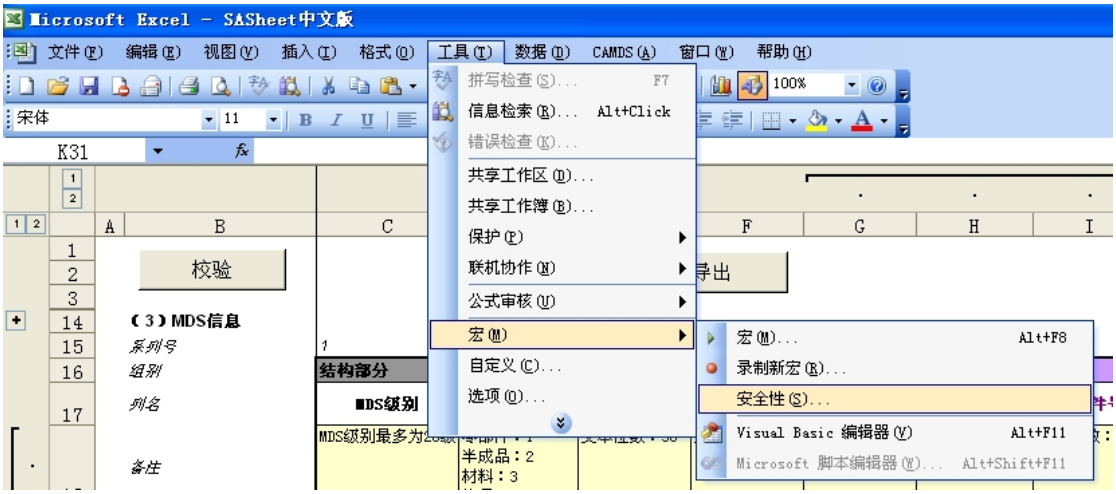
CAMDS interface tool sets up security function and needs password to visit.

3.1.1 Macro security setting of Excel 2003

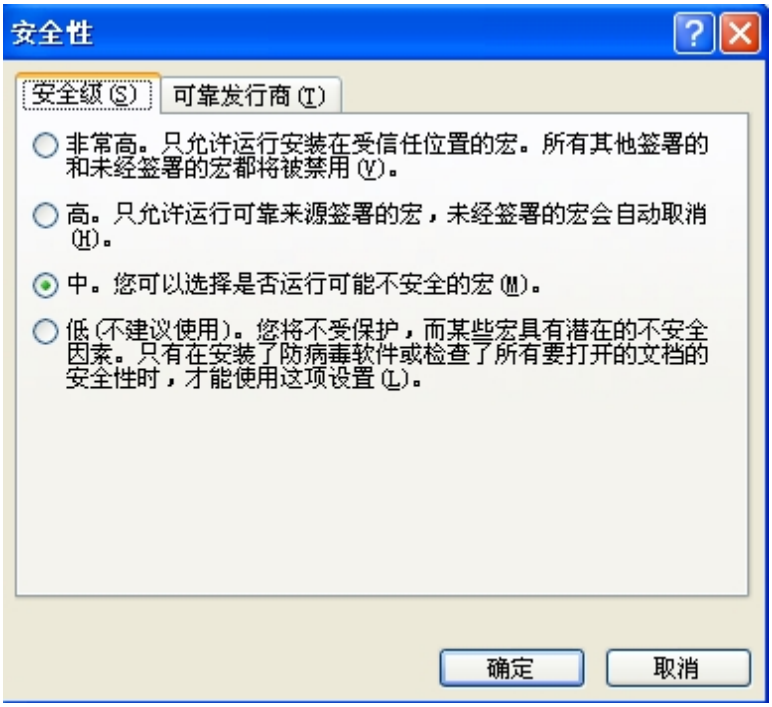
The following message appears after opening into Editor Excel sheet.



Click “Enable Macro” button to enter into the Sheet.
Macro security: Click “Tools” menu to choose security level.

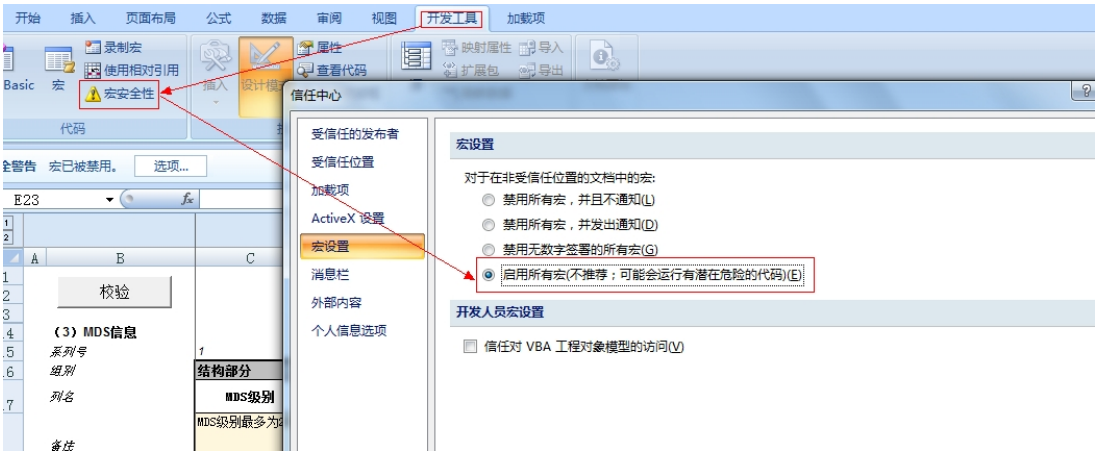


Security dialog box pops up. Check the level of “medium” as the following:



3.1.2 Macro security setting of Excel 2007

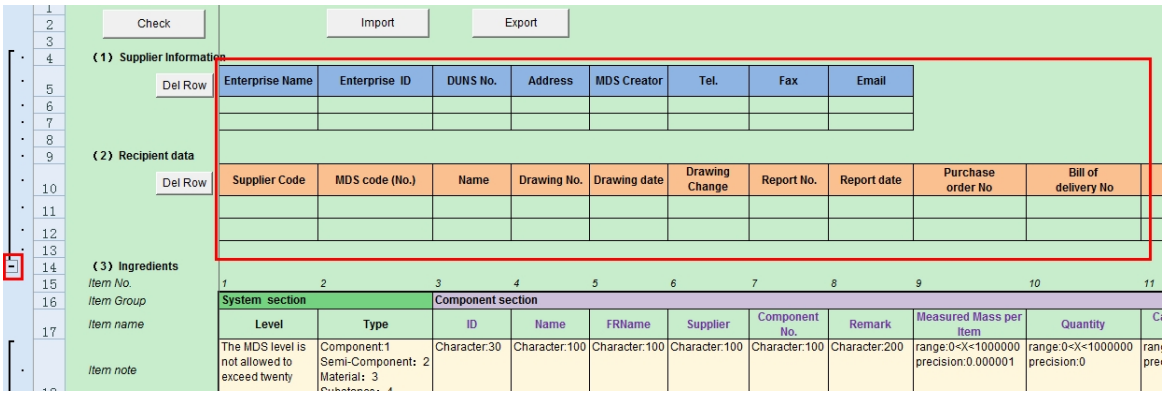
After entering into Excel, click “Macro Security” in the “Developer” tab and choose “Enable all Marcos”.



3.2 Editor Excel sheet entring procedures

3.2.1 Enter information about Supplier Recipient field.

Click the first button of "+、-" in the left column to extend or hide Supplier/Recipient field:

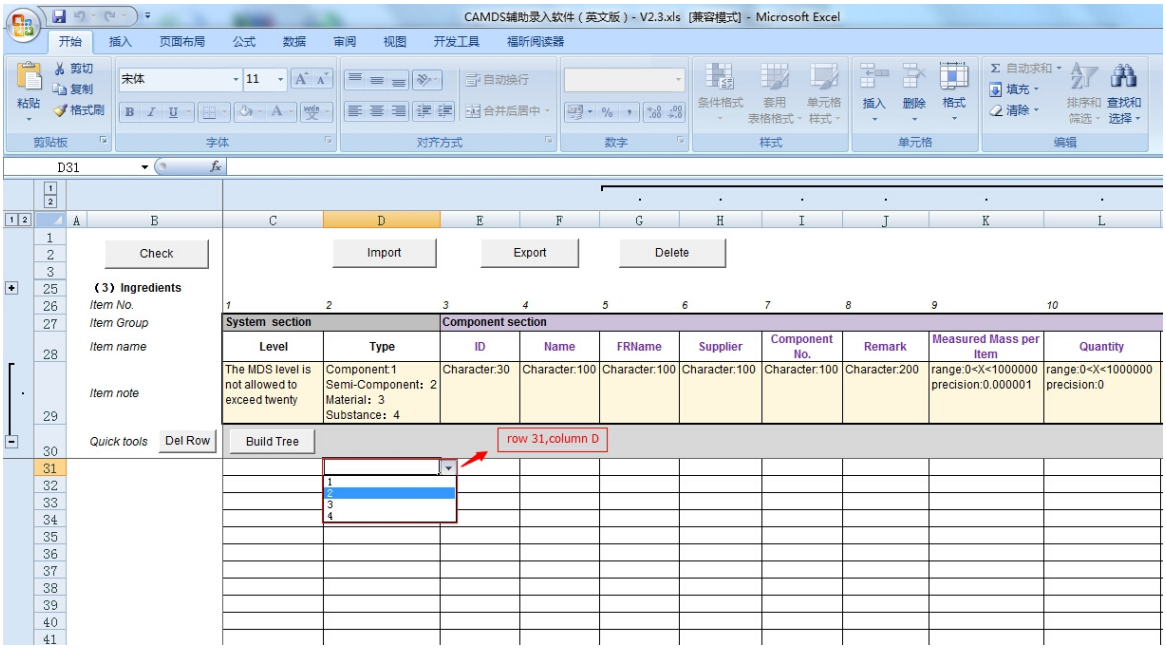


Entry rules are as follows:

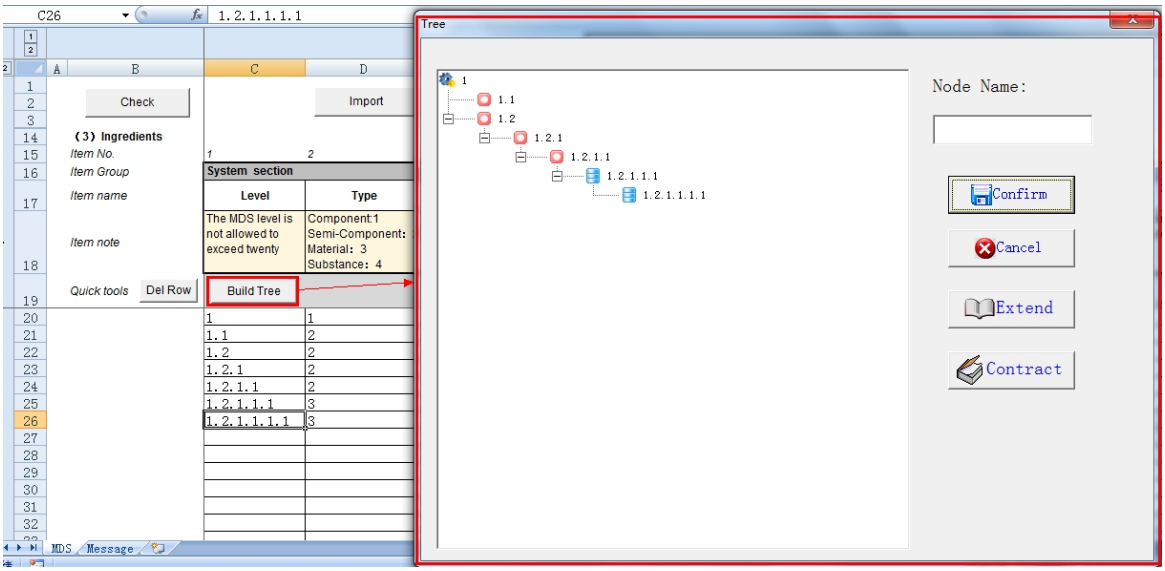
S/N	Name of Field	Entry rules	Remarks
1	Enterprise Name	Text, digits: 50	Optional
2	Enterprise ID	Text, digits: 30	Optional
3	DUNS No.	Text, digits: 11	Optional
4	Address	Text, digits:100	Optional
5	MDS Creator	Text, digits:60	Optional
6	Tel.	Text, digits:40	Optional
7	Fax	Text, digits:40	Optional
8	Email	Text, digits:80	Optional
9	Supplier Code	Text, digits:20	Optional
10	MDS code (No.)	Text, digits:20	Optional
11	Name	Text, digits:100	Optional
12	Drawing No.	Text, digits:20	Optional
13	Drawing date	Time,YYYY-MM-DD	Optional

		hh.mm.ss	
14	Drawing Change level	Text, digits:20	Optional
15	Report No.	Text, digits:20	Optional
16	Report date	Time,YYYY-MM-DD hh.mm.ss	Optional
17	Purchase order No	Text, digits:30	Optional
18	Bill of delivery No	Text, digits:30	Optional
19	Reason for detail	Text, digits:200	Optional
20	Forwarding is allowed	Choose “Yes” or “No”	Yes：1；No：0
21	Remark	Text, digits:100	Optional

3.2.2 Enter MDS types and level



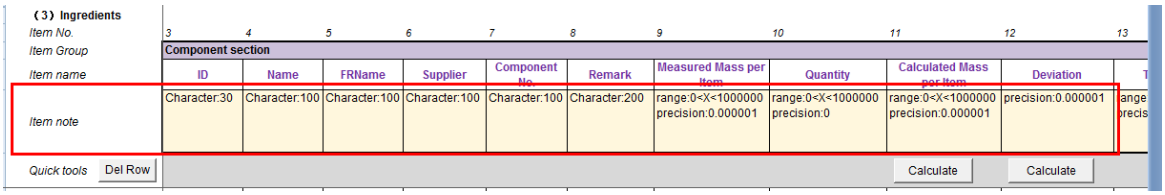
Choose “Type” cell first to identify node as “Component” (Marked as 1), “Semi-Component” (Marked as 2), “Material” (Marked as 3) or “Substance” (Marked as 4). Then, click the button of “Build Tree” to create “Level”. MDS hierarchy is shown in tree structure: Root node is 1, and its Child node is 1.1, 1.2. Following the same rule, the level number of all child nodes is generated by parent node plus “.1”.



Click “Confirm” in the tree structure dialog box to generate MDS level in designated node. Click “Cancel” to close the tree structure dialog box. Click “Extend” to extend the tree structure. Click “Contract” to close it. At the same time, the symbols of“+ and -” can also be optional to extend or close the tree structure.

3.2.3 Enter information about Component section, Semi-component section, Material section, Substance section and Node section

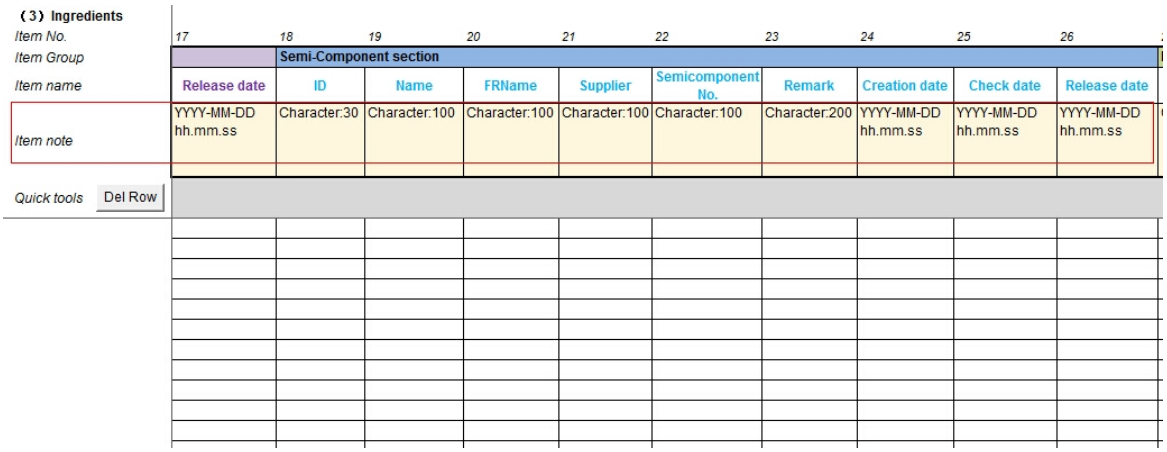
(1) Enter information about Component field in “Component Section”



Entry rules:

S/N	Field Name	Entry rules	Remarks
1	ID	Text, digits: 30	Optional
2	Name	Text, digits:100	Required
3	FR Name	Text, digits:100	Optional
4	Supplier	Text, digits:100	Optional
5	Component No.	Text, digits:100	Optional
6	Remark	Text, digits:100	Optional
7	Measured Mass per Item	Range:0<X<1000000. Precision:0.000001	Required
8	Quantity	Range：0<X<1000000 Precision：0	Required when Component is child node
9	Calculated Mass per Item	Range：0<X<1000000 Precision：0.000001	Obtain by clicking the following button of “Calculation”
10	Deviation	Precision：0.000001	Obtain by clicking “Calculation” button
11	Tolerance	Range：0≦X<100 Precision：0.000001	Required
12	Polymeric part marked	Choose “Yes”, “No” or “Inapplicable”	Required: 1, Yes; 2, No;3,Not Applicable when the material types and mass requirements are met.
13	Creation、Check and Release date	Time,YYYY-MM-DD hh.mm.ss	Optional

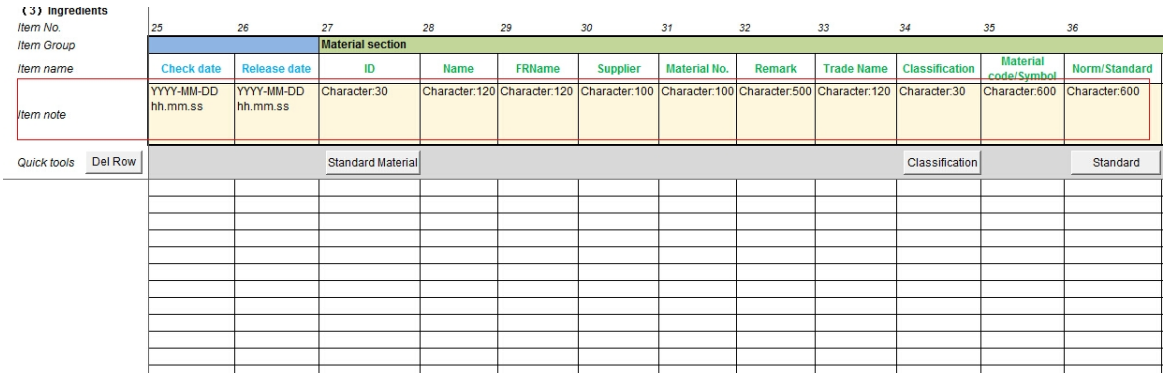
(2) Enter information about Semi-component field in “Semi-Component Section”



Entry rules

S/N	Field Name	Entry rules	Remarks
1	ID	Text, digits: 30	Optional
2	Name	Text, digits:100	Required
3	FR Name	Text, digits: 100	Optional
4	Supplier	Text, digits: 100	Optional
5	Semi-component No.	Text, digits: 100	Optional
6	Remark	Text, digits: 200	Optional
8	Creation、Check and Release date	Time, YYYY-MM-DD hh.mm.ss	Optional

(3) Enter information about Material field in “Material section”

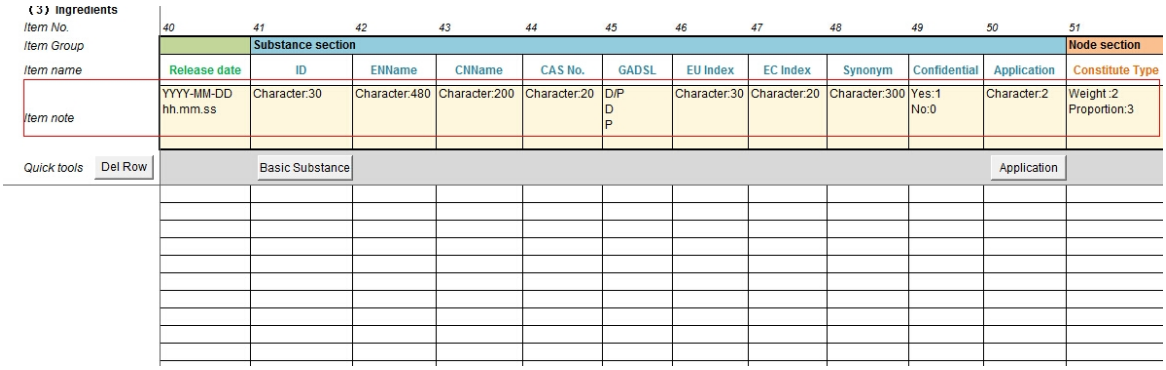


Entry rules

S/N	Field Name	Entry rules	Remarks
1	ID	Text, digits: 30	Optional
2	Name	Text, digits:120	Required
3	FR Name	Text, digits:120	Optional

4	Supplier	Text, digits:100	Optional
5	Material No.	Text, digits:100	Optional
6	Remark	Text, digits:500	Optional
7	Trade Name	Text, digits:120	Optional
8	Classification	Text, digits:30	Required. Choose by clicking the button of “Classification”
9	Material Code/Symbol	Text, digits:600	Optional
10	Norm/Standard	Text, digits:600	Click the button of “Norm/Standard”
11	Test Report No.	Text, digits: 50	Optional
12	Creation, Check and Release date	Time, YYYY-MM-DD hh.mm.ss	Optional

(4) Enter information about Basic Substance field in “Substance Section”

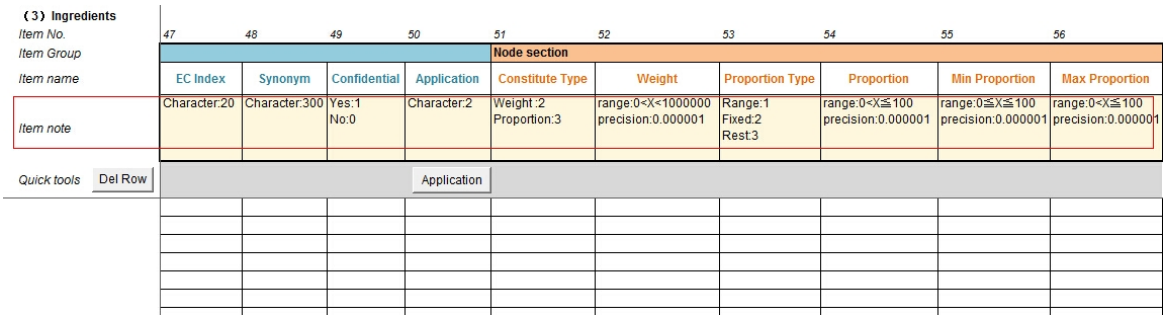


Entry rules:

S/N	Field Name	Entry rules	Remarks
1	ID	Text, digits:30	Required and obtained by clicking “Basic substance” button.
2	EN Name	Text, digits:480	Optional
3	CN Name	Text, digits200	Optional
4	CAS No.	Text, digits 20	Optional
5	GADSL	Enter D/P、D or P	Optional
6	EU Index	Text, digits 30	Optional
7	EC Index.	Text, digits 20	Optional
8	Synonym	Text, digits 300	Optional
9	Confidential	Choose “Yes” or “No”	Required: 1, Yes. 0: No
10	Application	Text, digits 2	Required when Root node is component and needs to be added. Obtained by

			clicking “Application” button.

(5) Enter information about Node field in “Node Section”



Entry rules:

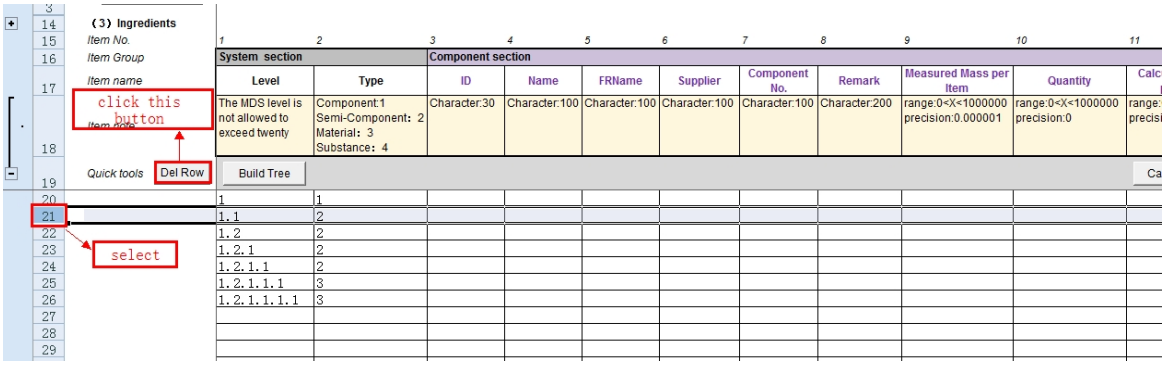
S/N	Field Name	Entry rules	Remarks
1	Constitute Type	Choose “Weight” or “Proportion”	Required. Weight：2；Proportion：3
2	Weight	Range：0<X<1000000 Precision：0.000001	Required when choose“ Weight”
3	Proportion Type	Choose Range, Fixed or Rest”	Required when choose “Proportion”. Range：1；Fixed：2；Rest：3
4	Fixed proportion	Range：0<X≦100 Precision：0.000001	Required when choose “Fixed”
5	Minimum proportion	Range：0≦X≦100 Precision：0.000001	Required when choose ”Range”
6	Maximum proportion	Range：0<X≦100 Precision：0.000001	Required when choose “Range”

Enter information about Semi-component, Material and Basic substance constitute type in “Node Section”

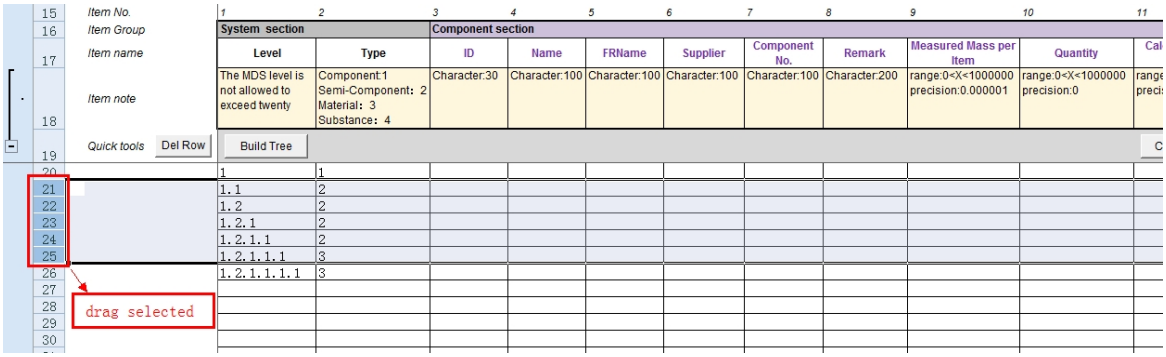
3.2.4 Page Layout

(1) “Del Row” operation

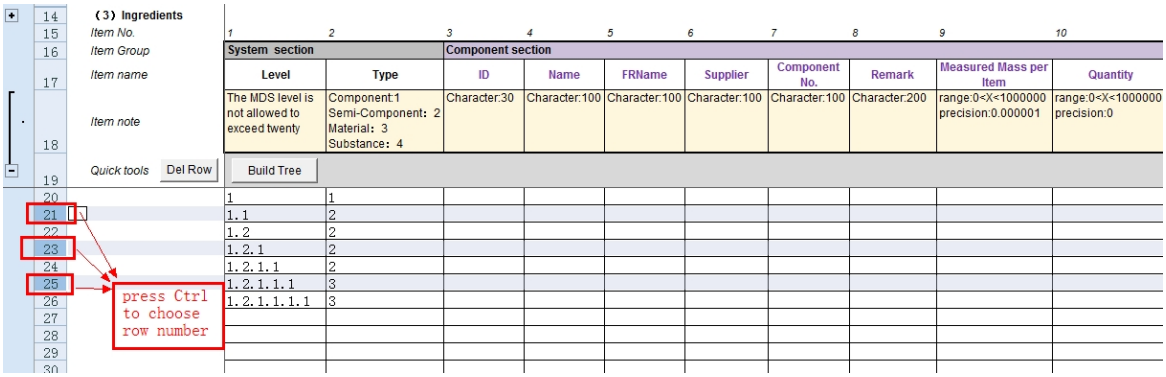
While entering Excel, if there is a row of error entry, choose the row number in the front and click the button of “Del Row” to delete the error.



To delete many continuous rows, choose the row number in the front and pull downwards to select many continuous rows. Then click "Del Row" to delete all the selected rows.

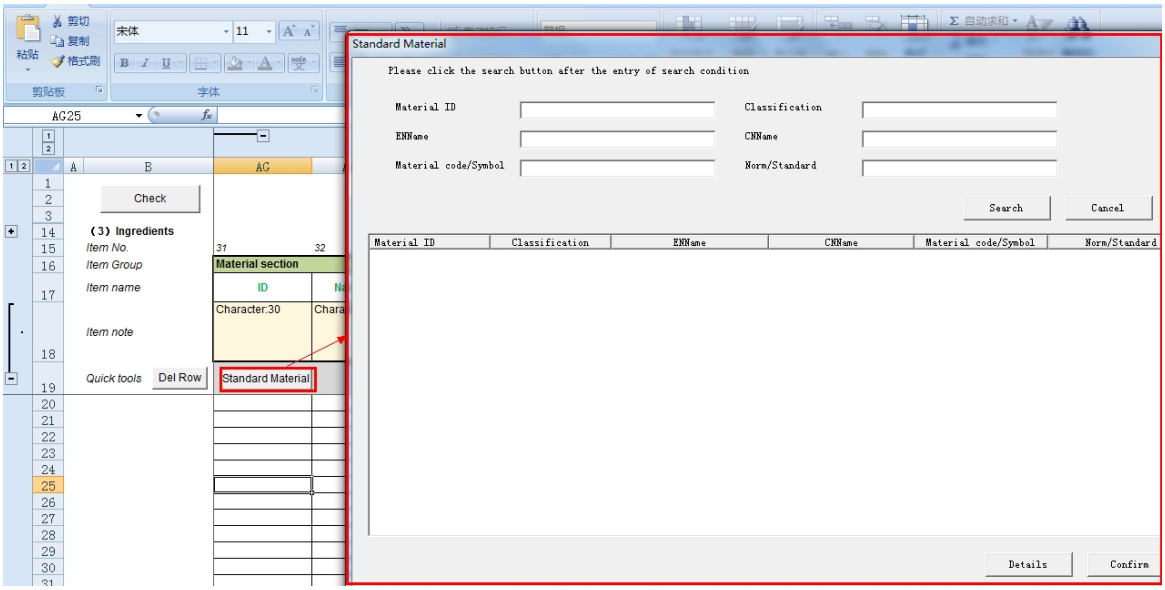


To delete spaced rows, press Ctrl to choose row numbers before clicking “Del Row”. Then click "Del Row" to delete the selected rows.



(2) Add “Standard Material”

If node type is chosen as material, click “Standard Material” to add.

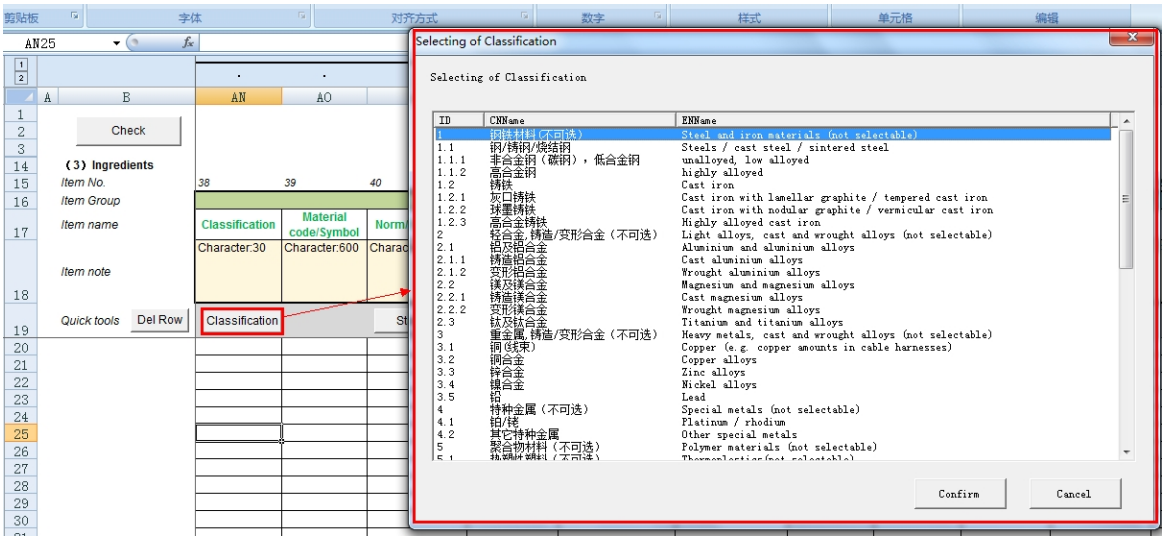


There are 6 search conditions such as “Material ID, Classification, ENName”. Entry of any condition will find the desired result. The results are searched according to the intersection of the searching condition. Fuzzy researching is supported.

Note: the Material field of “Standard material” is assigned value to correspondent cell. Manual revision of some contents is not recommended.

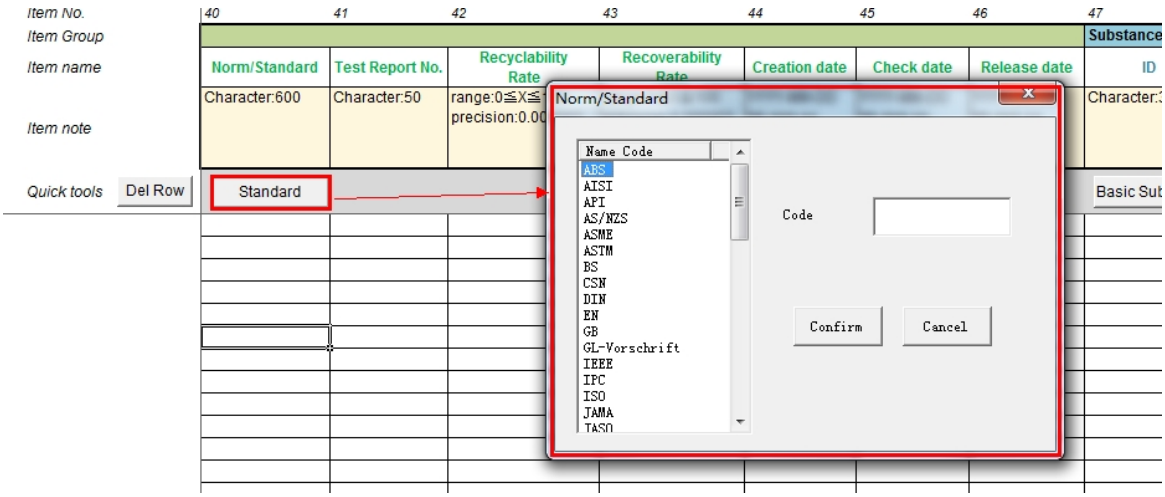
(3) Choose “Classification”

Choose the material types to be added by clicking the button of “Classification”. Those include “unselected” can not be chosen.



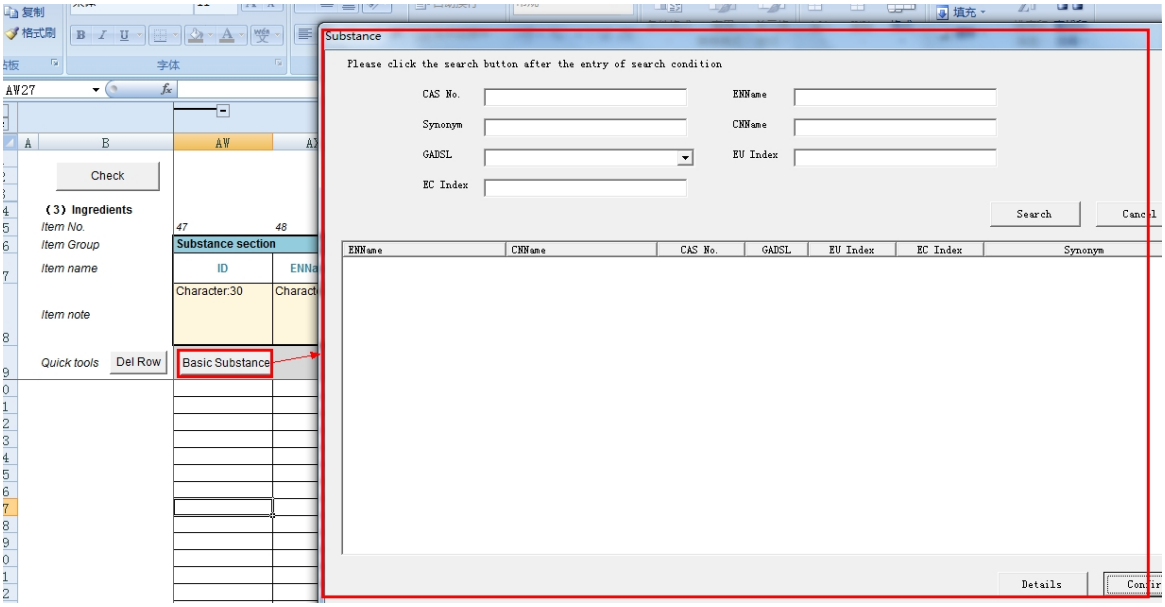
(4) Choose “Norm/Standard”

Choose the quoted standards and code of materials by clicking the button of “Norm/Standard”. Multi-choice is supported. When choose many items of “Norm/Standard”, all the material standards and numbers will be assigned value to the cell of “Norm/Standard” with the separation of “;”.



(5) Add “Substance”

Click the button of “Substance” to manually add basic substances.

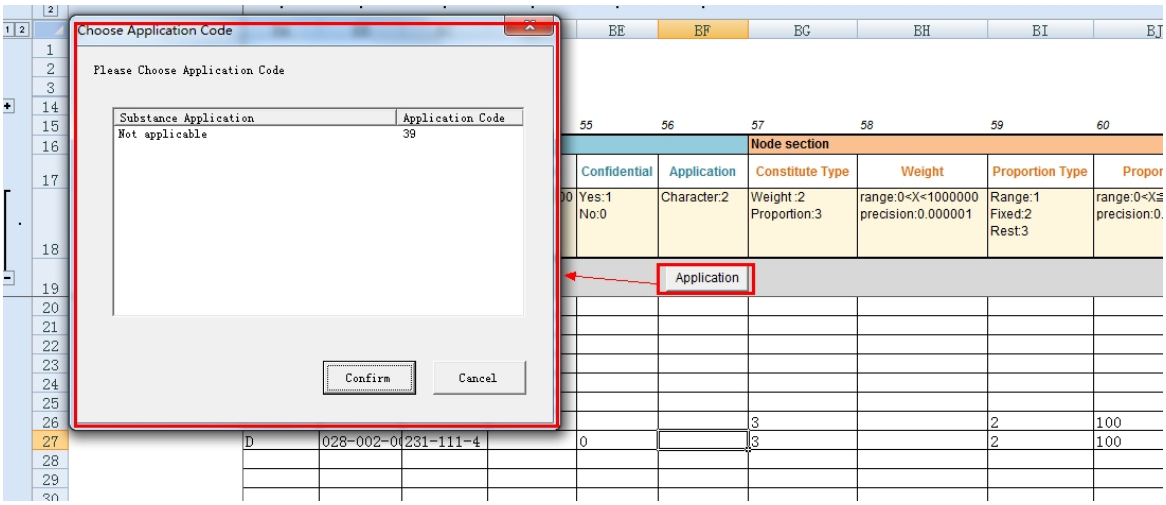


There are 7 search conditions such as “CAS No, ENName and Synonym”. Entry of any condition will find the desired result. The results are searched according to the intersection of the searching condition. Fuzzy researching is supported.

Note: the field of basic substance is automatically assigned value. Apart from “Confidential”, please do not alter other fields manually. The default field of “Confidential” is “No”. Please choose “Yes” in the combo box under the field of confidential substance to make it confidential.

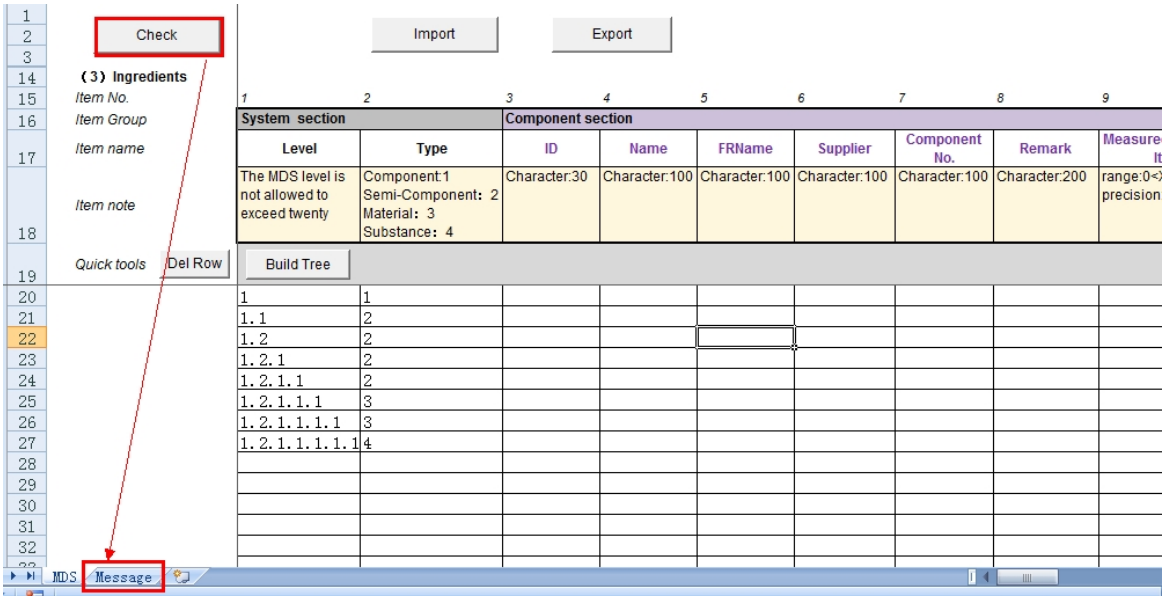
(6) Add “Application” for Basic substance

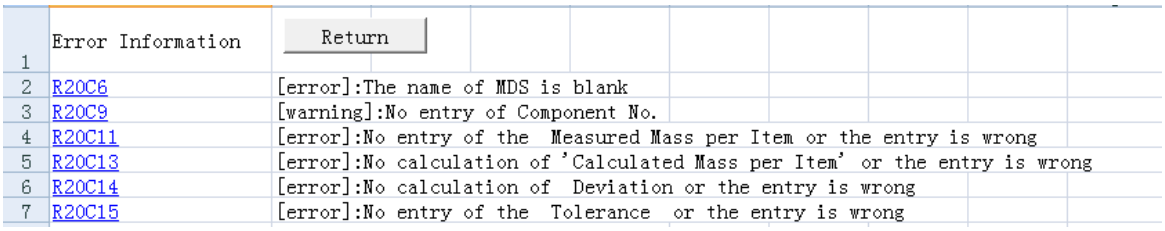
If necessary, click the button of “Application” to add application for Basic substance. When it is not necessary to add application for Basic substance, after clicking the button of “Application”, a message box pops up saying “No need to select an application for the basic substance”.



(7) "Check" operation

Click the button of "Check" to show errors and warnings of the current Sheet. Click the positioning of lines and columns to target the errors:




Error Information
Return
R20C6
[error]:The name of MDS is blank
R20C9
[warning]:No entry of Component No.
R20C11
[error]:No entry of the Measured Mass per Item or the entry is wrong
R20C13
[error]:No calculation of 'Calculated Mass per Item' or the entry is wrong
R20C14
[error]:No calculation of Deviation or the entry is wrong
R20C15
[error]:No entry of the Tolerance or the entry is wrong

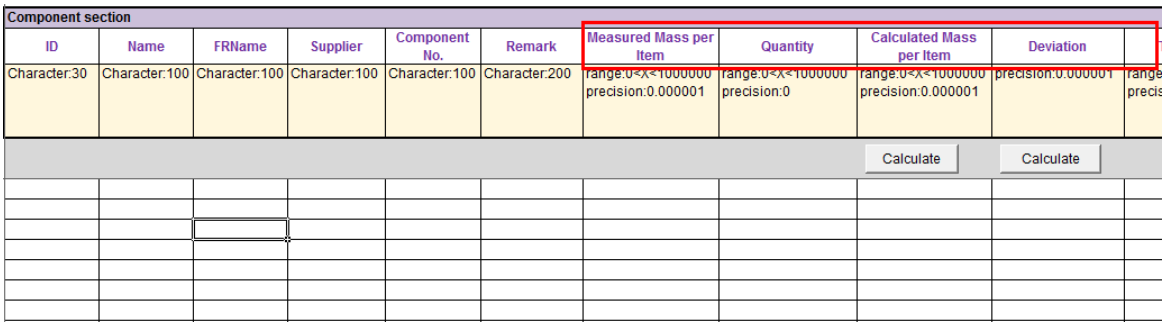
3.3 Sheet entry rules

"ID" cell can not be filled in manually. To introduce the existing components in CAMDS, sheet with CSV format is needed to be downloaded before importing the node positions needed to be added.

"ID" is not needed to be filled in if the component is self-built. (Apart from Material, for many self-established materials of the same type, CAMDS + a number can be filled in ID cell, see 5.3.3).

3.3.1 Add component into the component section

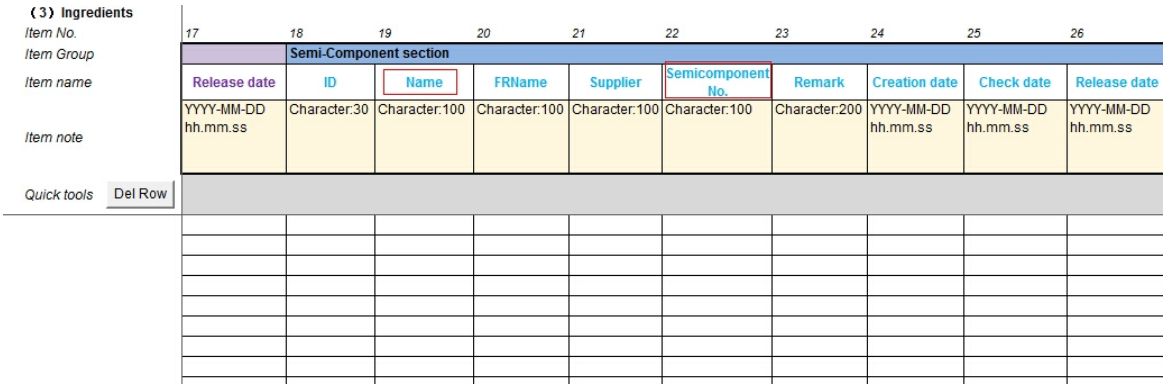
Information about "Name, Component No., Measured Mass per Item, Quantity, Calculated Mass per Item, Deviation and Tolerance" of component child node can be added in the section of "Component ".



All information about component node is filled in the section of "Component". "Calculated Mass per Item" is obtained by clicking the button of "Calculation" below. "Measured mass per Item" of the node component can be added manually. Calculation deviation of component can be obtained by clicking the button of "Calculation" under "Deviation". Fill in "Tolerance" manually which should not be less than the calculated "Deviation".

3.3.2 Add semi-component into the component section

Information about "Name and Semi-component No." of semi-component child node should be added in the section of "Semi-component". Information about node constitute of semi-component should be added to the section of "Node constitute".



Node section					
Constitute Type	Weight	Proportion Type	Proportion	Min Proportion	Max Proportion
~~Weight:2~~ Proportion:3	~~range:0 ≤X ≤1000000~~ precision:0.000001	~~Range:1~~ Fixed:2 Rest:3	~~range:0 ≤X≦100~~ precision:0.000001	~~range:0≦X≦100~~ precision:0.000001	~~range:0 ≤X≦100~~ precision:0.000001
2	100				
3		2	100		

When node constitute type is “Weight”, weight field is assigned value.

3.3.3 Add material into the component section

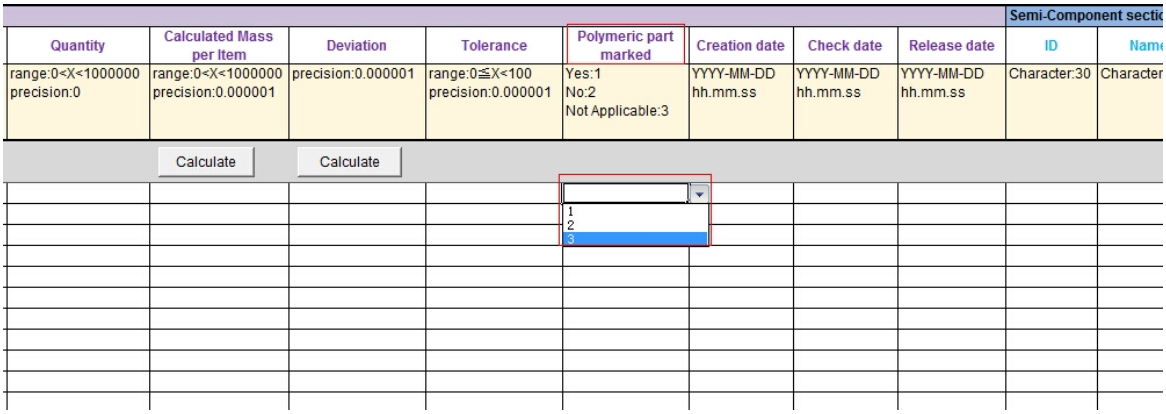
Information about “Name, Material No. and Material Classification” of material child node should be added in the section of “Material”. Information about node constitute type of material should be added under the section of “Node constitute”.

Material section											
ID	Name	FRName	Supplier	Material No.	Remark	Trade Name	Classification	Material code/Symbol	Norm/Standard	Test Report No.	R
Character:30	Character:120	Character:120	Character:100	Character:100	Character:500	Character:120	Character:30	Character:600	Character:600	Character:50	range preci
Standard Material							Classification		Standard		

Node section					
Constitute Type	Weight	Proportion Type	Proportion	Min Proportion	Max Proportion
~~Weight:2~~ Proportion:3	~~range:0 ≤X ≤1000000~~ precision:0.000001	~~Range:1~~ Fixed:2 Rest:3	~~range:0 ≤X≦100~~ precision:0.000001	~~range:0≦X≦100~~ precision:0.000001	~~range:0 ≤X≦100~~ precision:0.000001
2	100				
3		2	100		

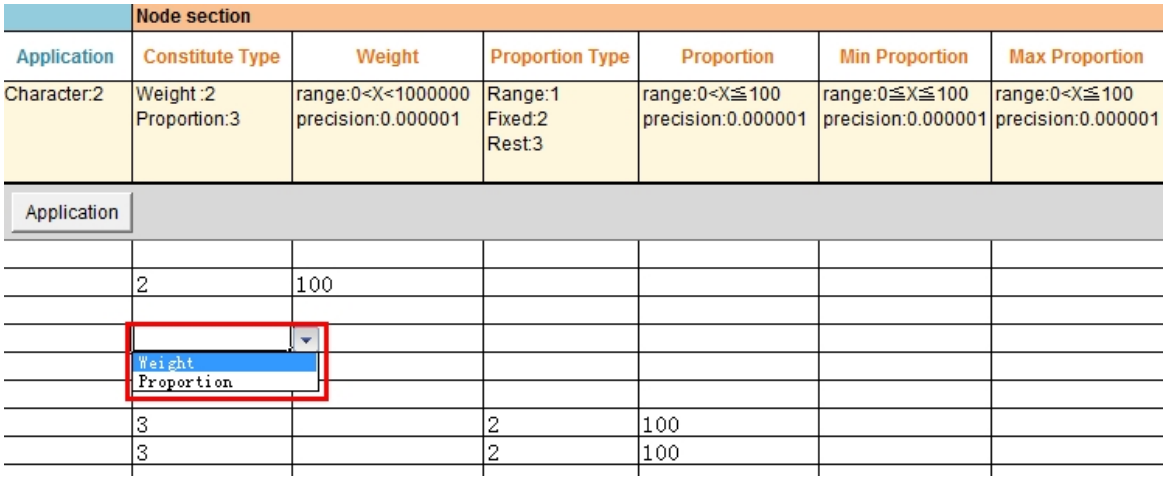
When “Node constitute type” is “Weight” (Marked as 2), and weight cell is assigned value.
“ID” cell can not be filled in manually. To introduce standard material, click the button of “Standard material” to get result through search conditions. If it is self-built material, then “ID” cell is empty and material names and types can be filled in.

When directly or indirectly adding material of 5.1.x, 5.4.x or 5.5.1 type that is over 100 g or adding materials of 5.2 or 5.3 type that is over 200g into component section, polymeric part should be marked as “Yes”.

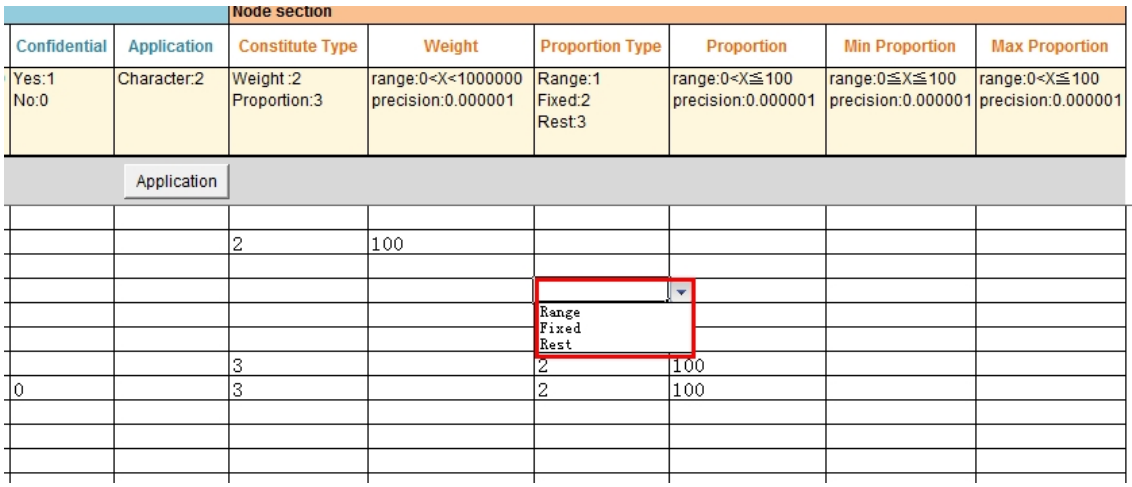


3.3.4 Add semi-component into the semi-component section

Add “Name, Semi-component No.” of semi componet child node in the section of “Semi-component”. And choose “Proportion” (marked as 3) in “Node constitute type”.



There are 3 types of proportions: “Range” (marked as 1), “Fixed” (marked as 2) and “Rest” (marked as 3). When “Range” is chosen, the cells of max and min values should be assigned value. When “Fixed” is chosen, fixed value cell should be assigned value. No value assigned when “Rest” is chosen.



3.3.5 Add material into the semi-component section

Information about "Name, Material No. and Classification" of material child node can be added in the section of "Material". Node constitute information of material should be added in "Node constitute". "Node constitute type" is chosen as "Proportion" with 3 types available.

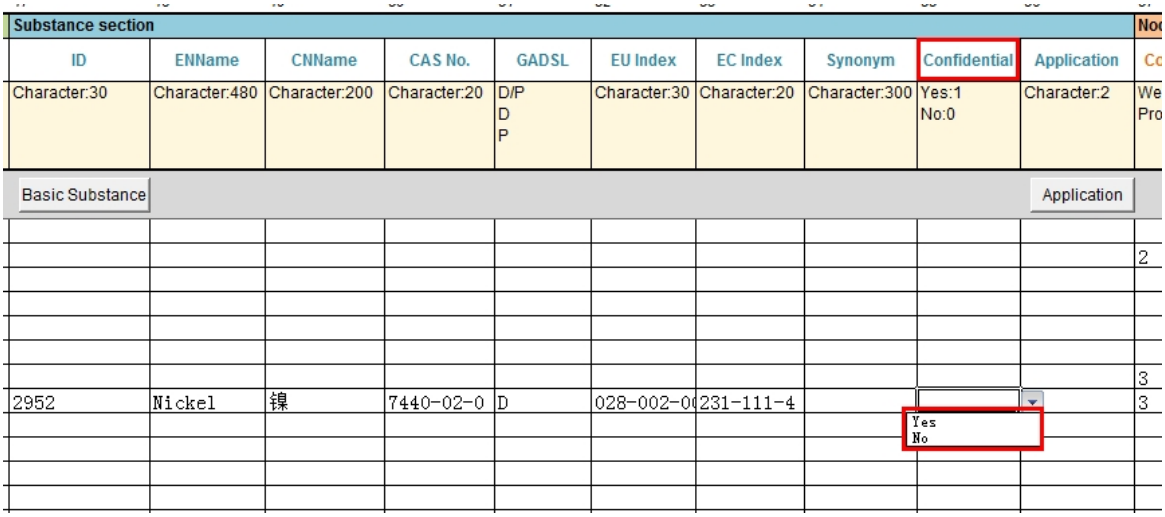
3.3.6 Add material into the material section

Same as the above

3.3.7 Add basic substance into the material section

Basic substance of child node must be searched by clicking "Basic substance" in "Basic substance" section. The result can be obtained and selected by inputting search conditions. Correspondent field of basic substance can be assigned value to correspondent cell. "Node constitute type" is chosen as "Proportion" with 3 types available.

Each and every basic substance needs to be selected as confidential substance or not: Yes (marked as 1), No (marked as 0).



3.3.8 Information about Suppliers

It is optional and based on the enterprises that own the login ID after being uploaded.

（1）Supplier Information

Enterprise Name	Enterprise ID	DUNS No.	Address	MDS Creator	Tel.	Fax	Email

3.3.9 Information about Recipients

（2）Recipient data

Supplier Code	MDS code (No.)	Name	Drawing No.	Drawing date	Drawing Change	Report No.	Report date	Purchase order No	Bill of delivery No	R

Recipients' information will be shown in "Enterprise information" after being uploaded. It can be seen after introducing recipients' information. Note: only the first recipient's information record can be uploaded.

（1）Supplier Information

Enterprise Name	Enterprise ID	DUNS No.	Address	MDS Creator	Tel.	Fax	Email
汽车回收利用	CA_3_4038		北京亦庄	康医飞	010-67832310	010-67832310	kangyifei@catarc.ac.cn

（2）Recipient data

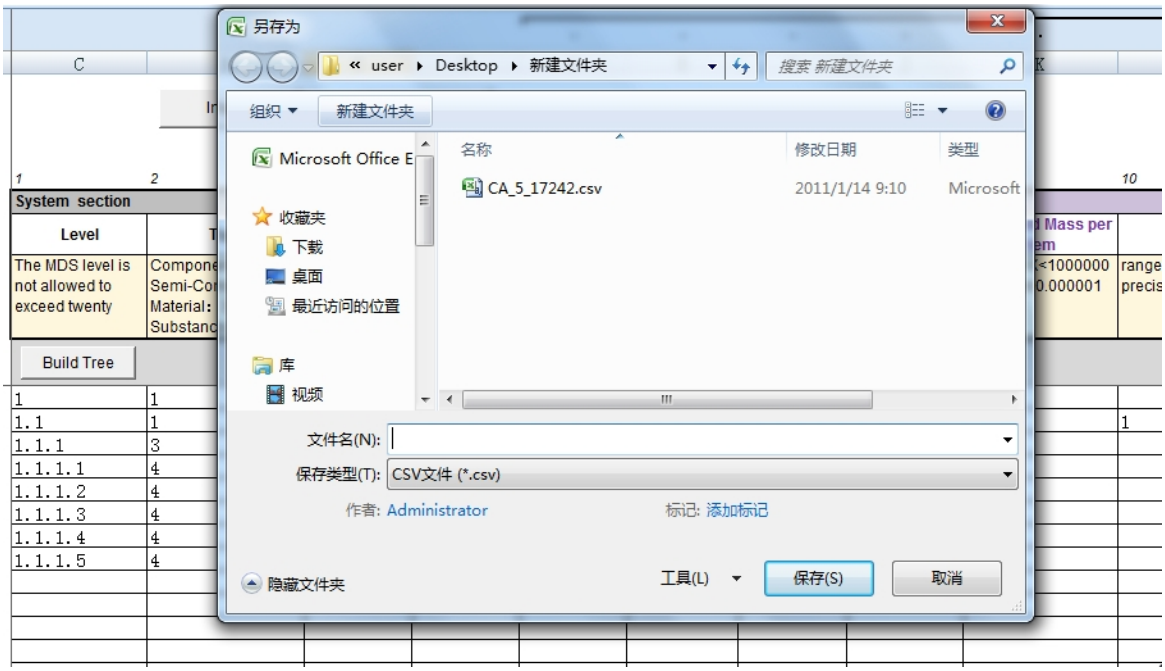
Supplier Code	MDS code (No.)	Name	Drawing No.	Drawing date	Drawing Change	Report No.	Report date	Purchase order No	Bill of delivery No	R
32	qweqw	发送批准								
432	2345	aaaa								

There are two pieces of recipient's information records. After clicking "Add recipients" after uploading, assign value to the column of "Enterprise information".
Two options for "Forwarding is allowed". Yes (marked as 1) and No (marked as 0).
Note: all the cells should be filled in with half-width English character.

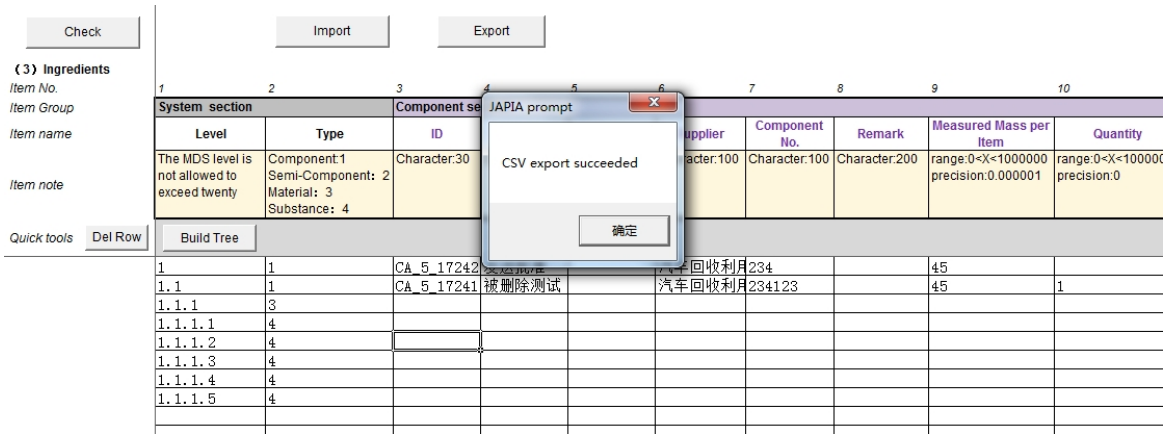
4 Sheet Export Methods and Notes

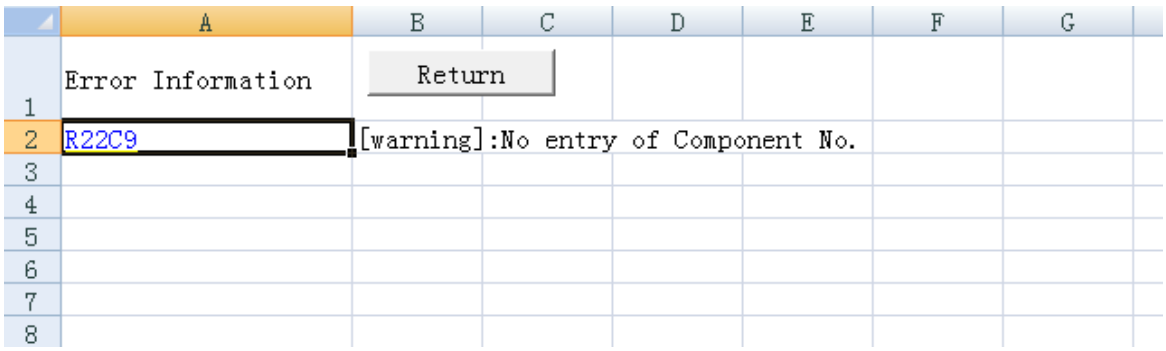
4.1 Sheet export rules

Click the button of "Export" ,it will popups "It may take a long time to check this MDS. Do you want to check it?" If you select yes,then it will check this MDS,if you select no,it will not check. If you choose to check the MDS and the CSV meet the conditions of seven(see Appendix Ⅱ),then the MDS export success.If you do not check the MDS, a file browsing dialog will pop up. Choose save route, fill in CSV file name, click "Save" to export CSV file to selected route.

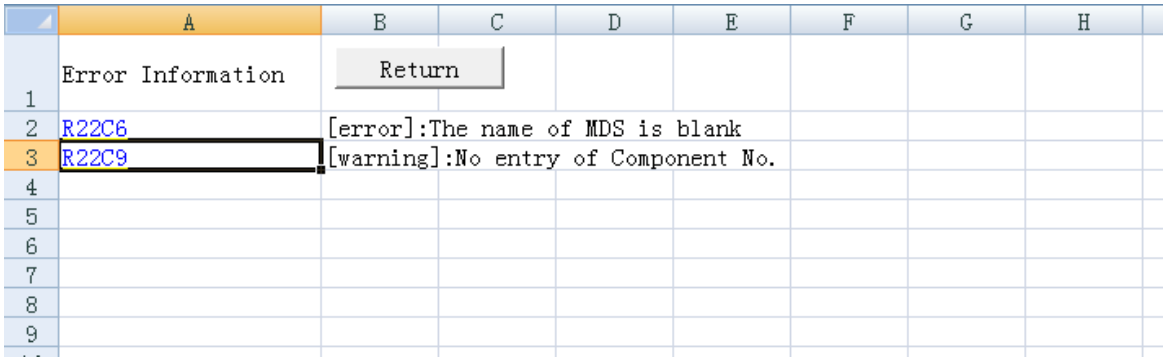


If choose to check the MDS, a message box of "CSV export succeeded" pops up. Click "Confirm" to shift to a page of "Check Message" to show the warning contents.





Errors pop up if the sheet has errors.



4.2 Export CSV File Format

4.2.1 Supplier Information

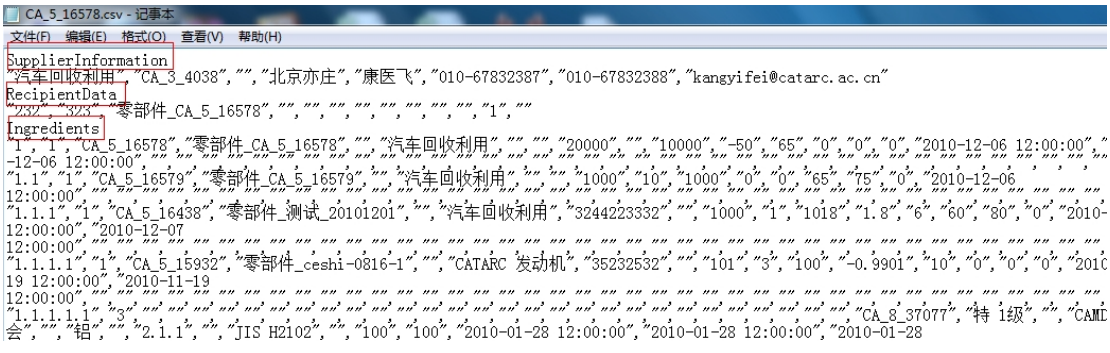
Supplier Information is the identification of suppliers. One or more lines below supplier identification shall be the relevant information about the supplier.

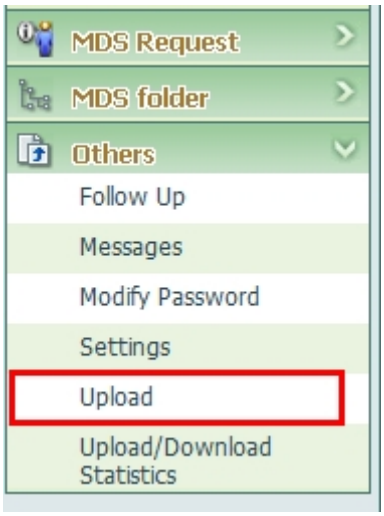
4.2.2 Recipient Information

Recipient Data is the identification of recipients. The detailed information of the line below recipient identification and the fields correspond to the MDS data respectively.

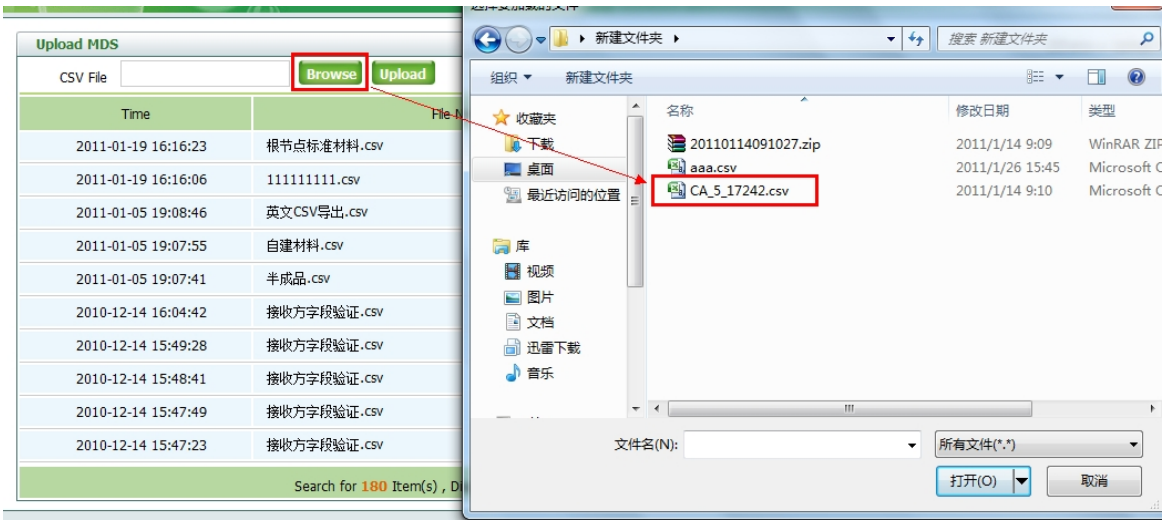
4.2.3 MDS Information

Ingredients are the identification of MDS. One or more lines below MDS identification shall be the detailed information of the MDS data put in order according to the level of nodes. The fields shall correspond to the MDS data.
For specific information, please refer to 2.2.3 Excel File Format

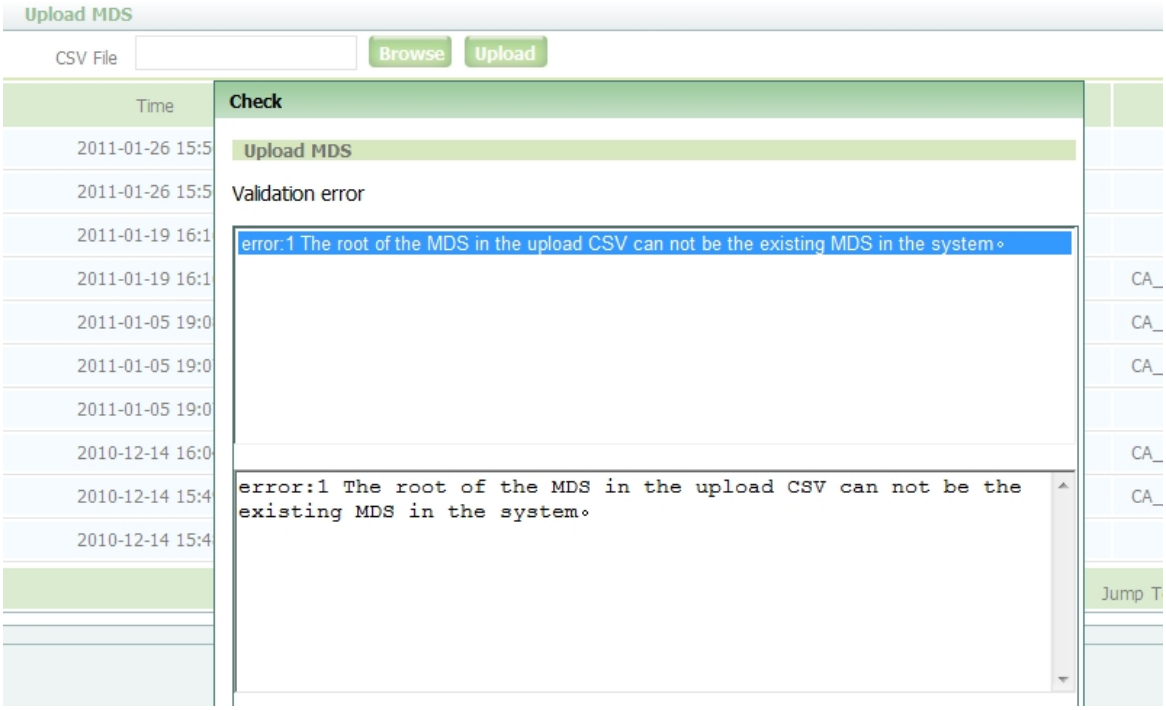

CA_5_16578.csv - 记事本
文件(F) 编辑(E) 格式(O) 查看(V) 帮助(H)
SupplierInformation
"汽车回收利用","CA_3_4038","","北京亦庄","康医飞","010-67832387","010-67832388","kangyifei@catarc.ac.cn"
RecipientData
"232","323","零部件_CA_5_16578","","","","","","","","","1",""
Ingredients
"1","1","CA_5_16578","零部件_CA_5_16578","","汽车回收利用","","","","20000","","10000","-50","65","0","0","0","2010-12-06 12:00:00","
-12-06 12:00:00","","","","","","","","","



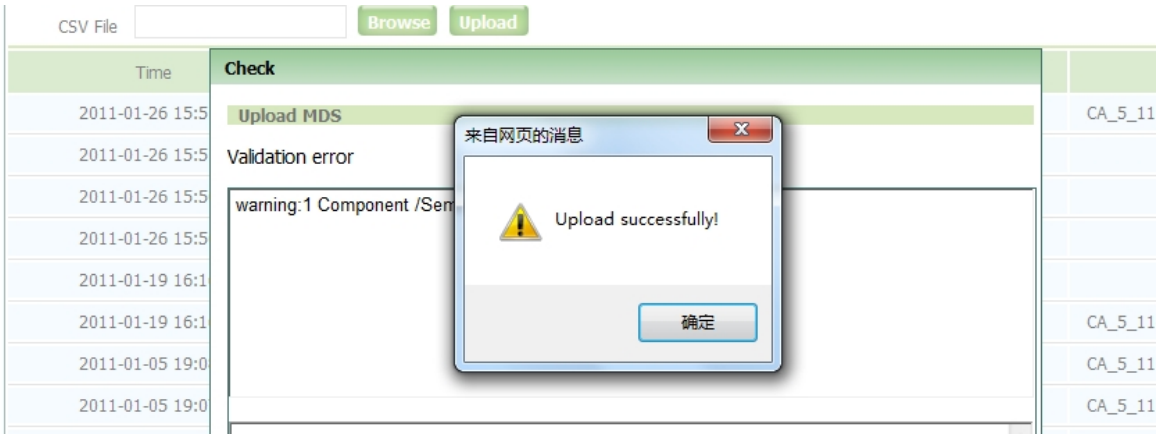
Click the button of “Browse” to upload CSV files needed.



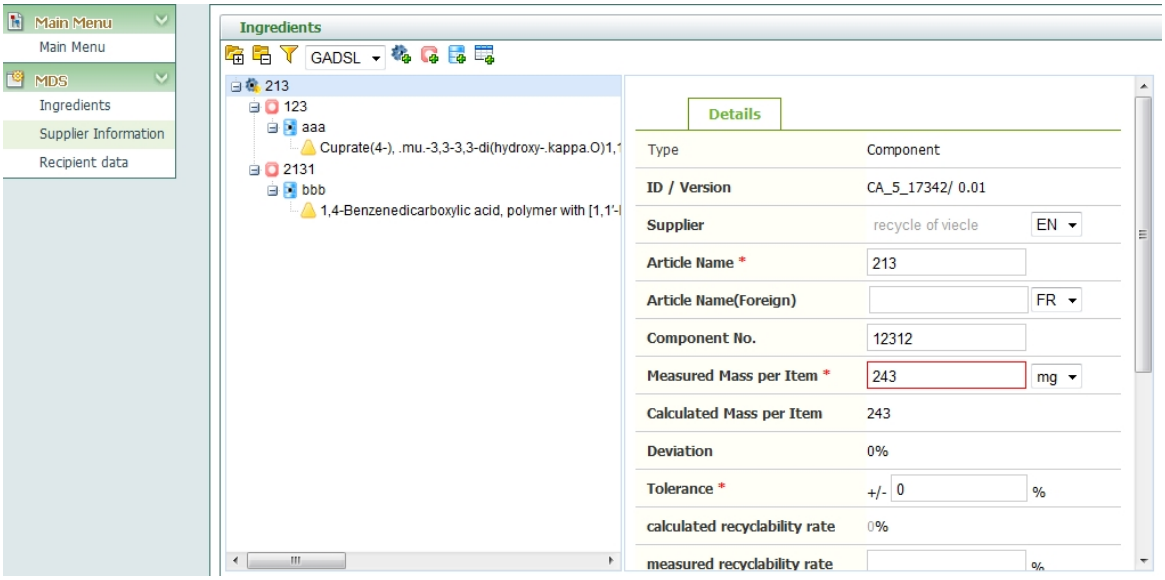
After selection, click the button of “Upload”. Errors will pop up if the Sheet has errors.


Upload MDS
CSV File
Browse
Upload
Time
Check
Upload MDS
Validation error
error:1 The root of the MDS in the upload CSV can not be the existing MDS in the system。
error:1 The root of the MDS in the upload CSV can not be the existing MDS in the system。

After “Close”, select the failed uploaded items, and there has the button of “Delete” on the right corner of the dialog. If there has no error in the Sheet, a message box pops up saying “Successful uploading.”



After “Confirm”, select the successfully uploaded items. There are two buttons on the right corner which are “View” and “Delete”. Click “View” to go to MDS details dialog.



The selected uploaded record can be deleted after clicking the button of “Delete”.

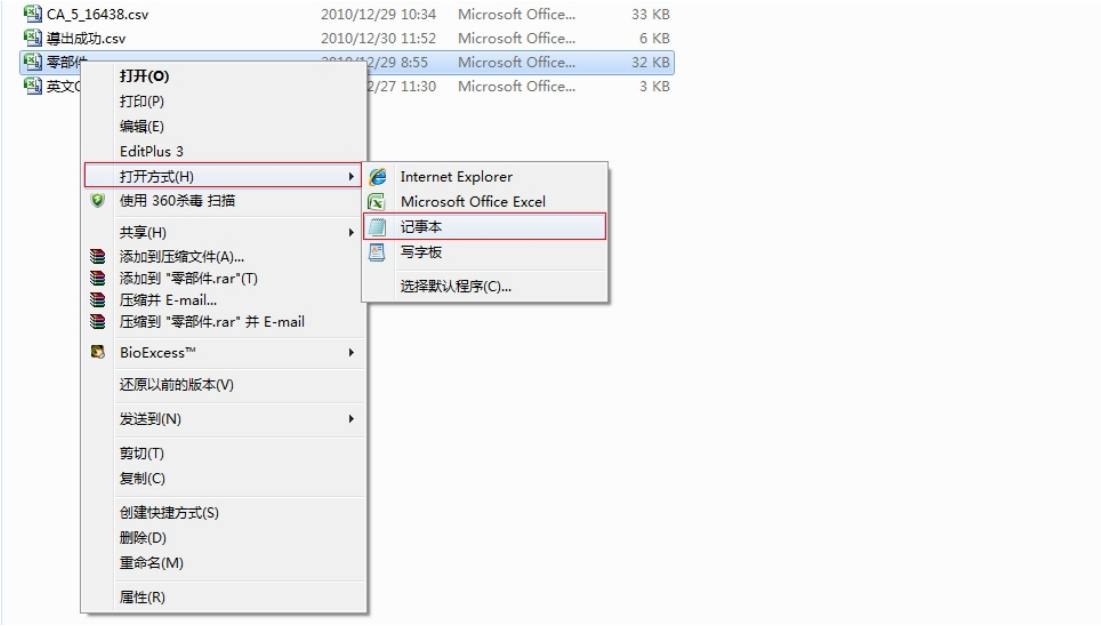
5.1 Check of CSV format

Serial No	Checking rules	Type
1	One record takes up one line.	Error
2	Each field must be separated with[,]	Error
3	The [ ] blank space is omitted in the beginning and in the end.	Error
4	The embedded comma must be put in a double quotation mark like [","].	Error
5	The embedded double quotation mark must be separated with a double quotation mark and the double quotation mark in the data shall be doubled.	Error
6	The embedded line feed field shall be included in a double quotation mark.	Error

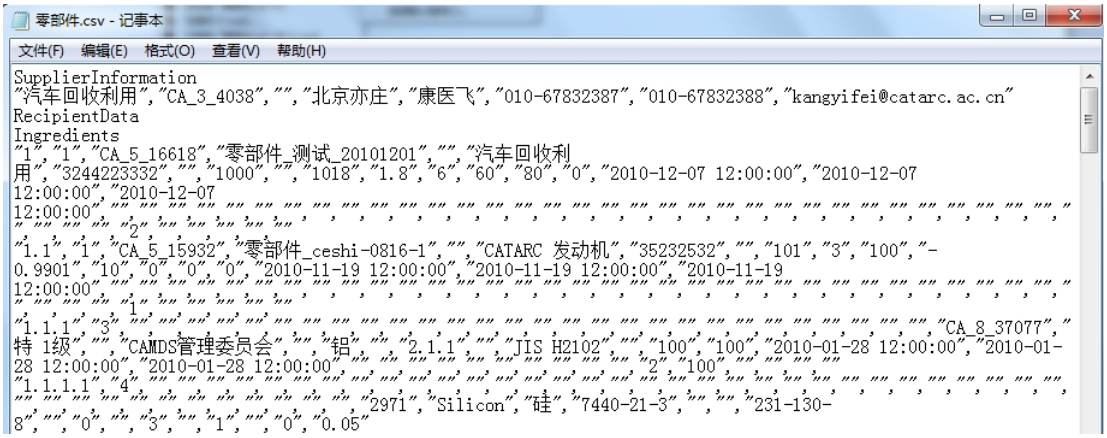
Note: please do not open CSV file with Excel. Please open CSV file with Wordpad to check whether the data in CSV file is damaged or not.

How to check CSV file:

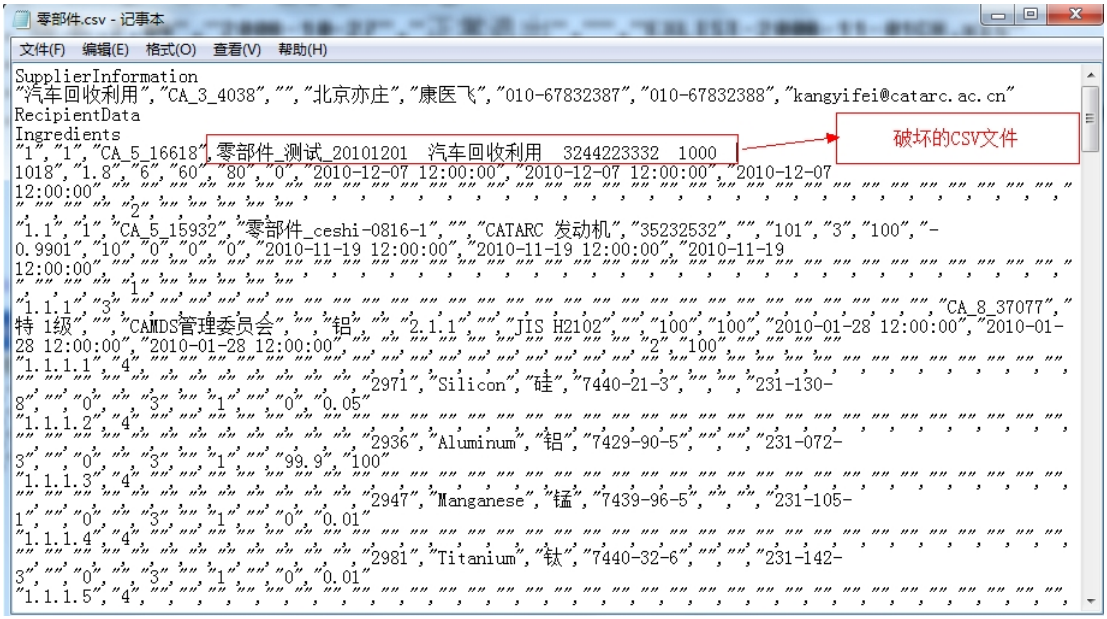
Right-click CSV and operate as the following screen to check CSV file:



Example: normal CSV file



Example: damaged CSV file.



Note: please do not alter the information in CSV file.

5.2 Uploading rule check

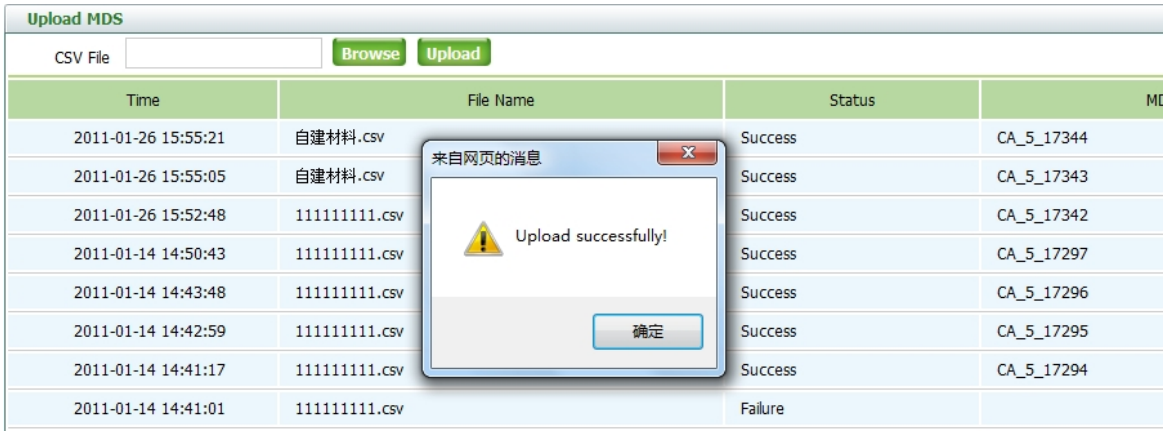
S/No	Rules	Content
1	All the online system rules need to be met.	See Appendix Ⅰ
2	No filling in or error of CSV field	Error in the check of the field data format (Please do not alter the field information of the CSV directly）
3	Unified error reporting of rules in CAMDS interface tool (apart from the errors caused by the online rules and characters)	Error in the upload information (Please do not alter the field information of the CSV directly)
4	Errors occur when the basic substance which are defined as "D, P, D/P" in GADSL as well as the basic substances whose CAS No. are "System" are selected as “Confidential substance”.	The basic substance which are defined as “D、P、D/P” in GADSL as well as the basic substance whose CAS No. are “system” can not be selected as confidential substance
5	MDS contains deleted or non-existed MDS or MDS ID of uploaded CSV is not in the enterprises.	Error in the referenced MDS
6	CSV has no content, no Supplier Information, no Recipient Data and no MDS information	Error in the format of CSV file.
7	If CSV has no MDS information	No MDS information in the upload CSV
8	The root of MDS in the upload CSV is the existing MDS in the system	The root of the MDS in the upload CSV can not be the existing MDS in the system.
9	ID of the basic substance does not exist	The basic substance does not exist

10	ID of the material classification does not exist	The material classification does not exist
11	The Norms/Standards of the material do not exist in the system	Error in the Norms/Standards of the material

The upload check rules include: check rules of the on-line system (S/No 1), designated validation rule of CIEsystem (No 4), errors that can be captured and caused by altering of CSV (No 2, 3, 5-10) and rules about uploading in the Design Document of CIE.

5.2.1 Node ID of MDS

If ID of MDS is existed, it will be regarded as the MDS already existed in the system., the only work is to judge its type and whether it matches with ID. If it matches, information about MDS's child node will be quoted directly without checking its correctness.
After successful uploading, the page is showed as below:



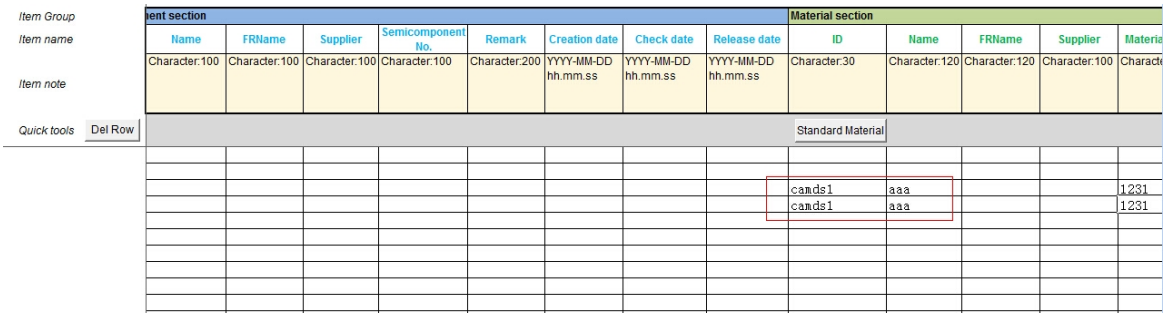
Root node ID of MDS in the upload CSV should not be the ID already existed in the system. The download CSV can not be regarded as root node to be imported into CAMDS interface tool and then uploaded into the system directly.

5.2.2 ID information about the user

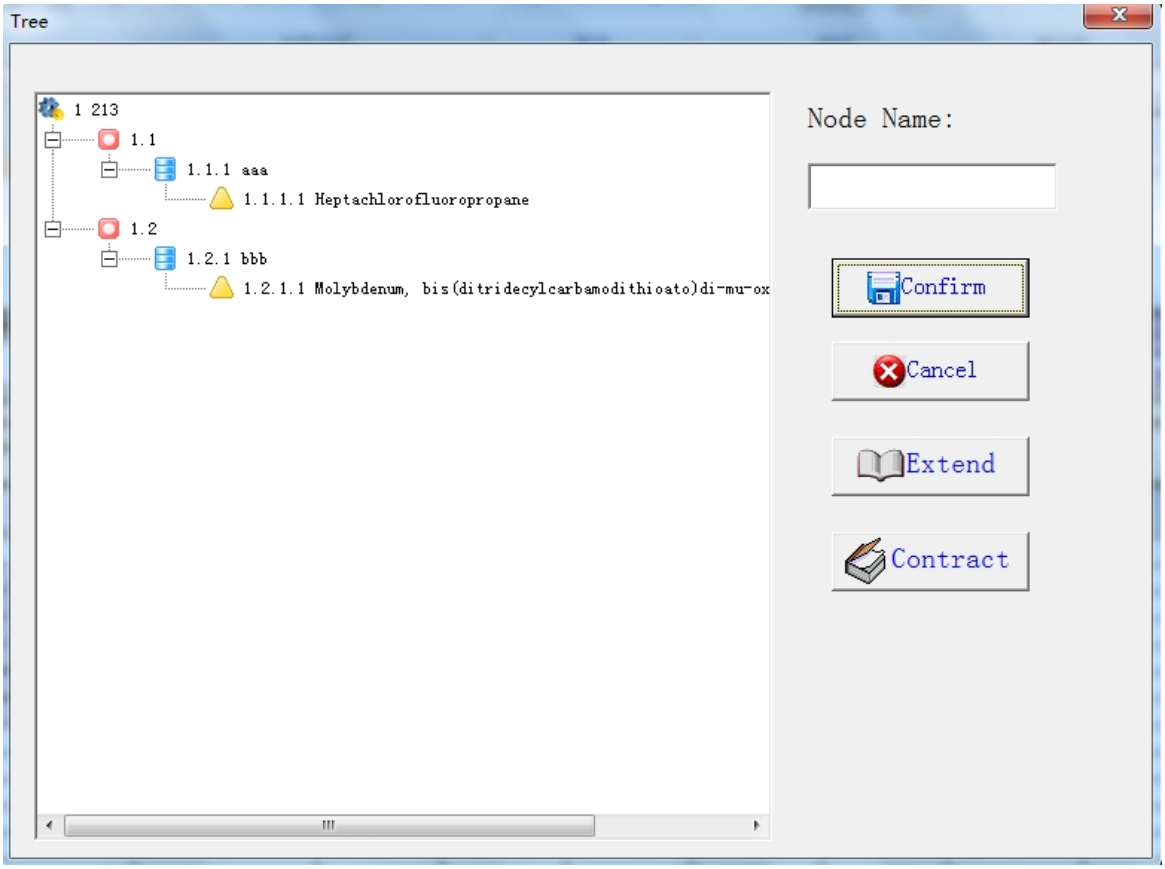
ID of the upload CSV must belong to MDS list of the user's organization., that is to say, node ID of the upload CSV must belong to the user's organization.

5.2.3 Upload with the same material ID

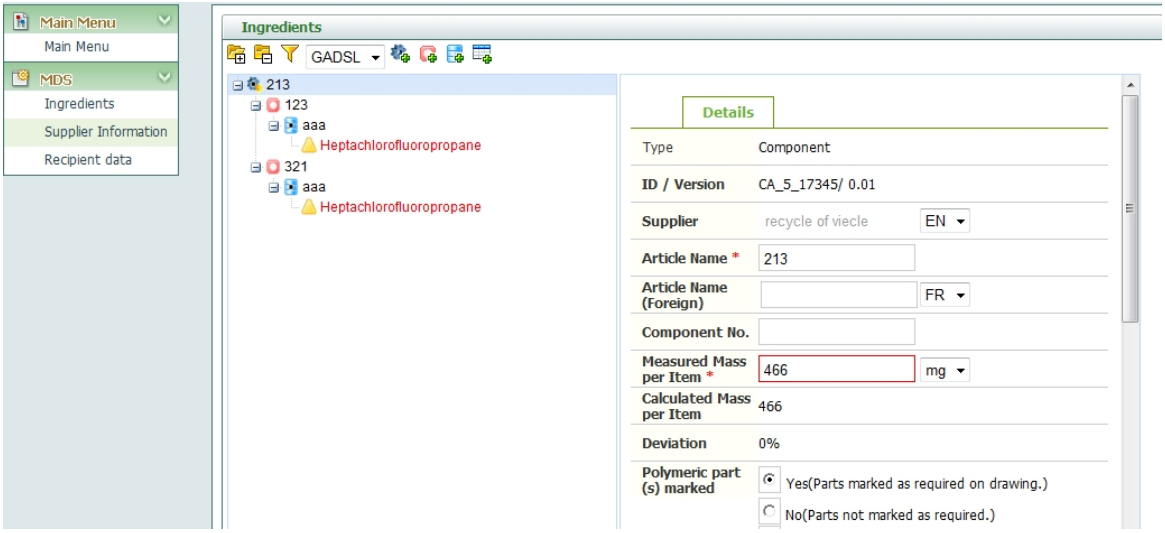
When user's self-defined data (CAMDS+number) of ID of self-built material are same, the system regards them as the same material and only checks the first material while building one-time system information.



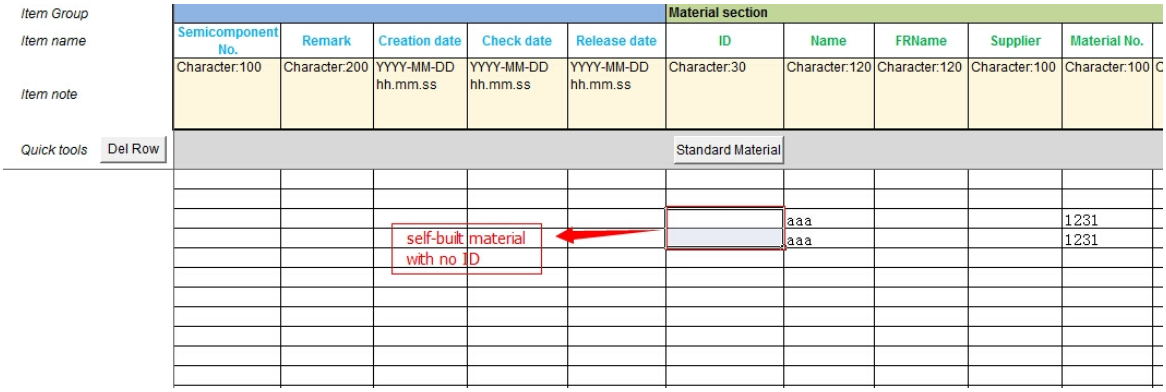
Item Group / Item name / Item note	ient section								Material section				
	Name	FRName	Supplier	Semicomponent No.	Remark	Creation date	Check date	Release date	ID	Name	FRName	Supplier	Materia
	Character:100	Character:100	Character:100	Character:100	Character:200	YYYY-MM-DD hh.mm.ss	YYYY-MM-DD hh.mm.ss	YYYY-MM-DD hh.mm.ss	Character:30	Character:120	Character:120	Character:100	Charact
Quick tools Del Row									Standard Material				
									camds1	aaa			1231
									camds1	aaa			1231



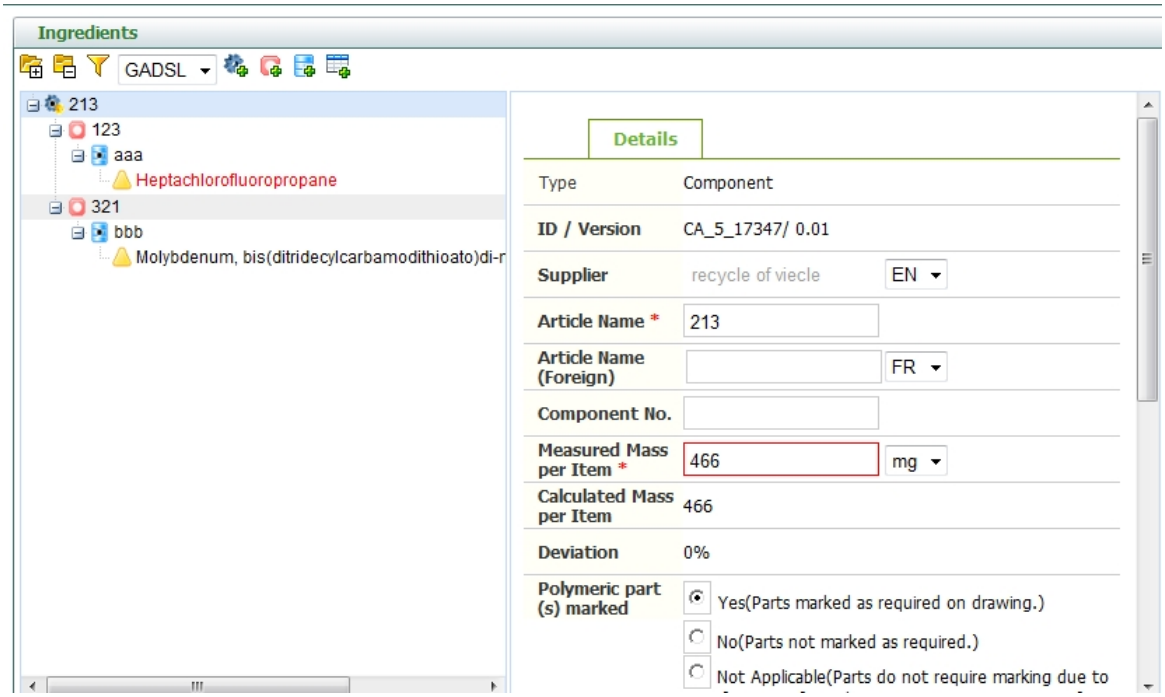
Check “Ingredients” after successful exporting uploaded information.



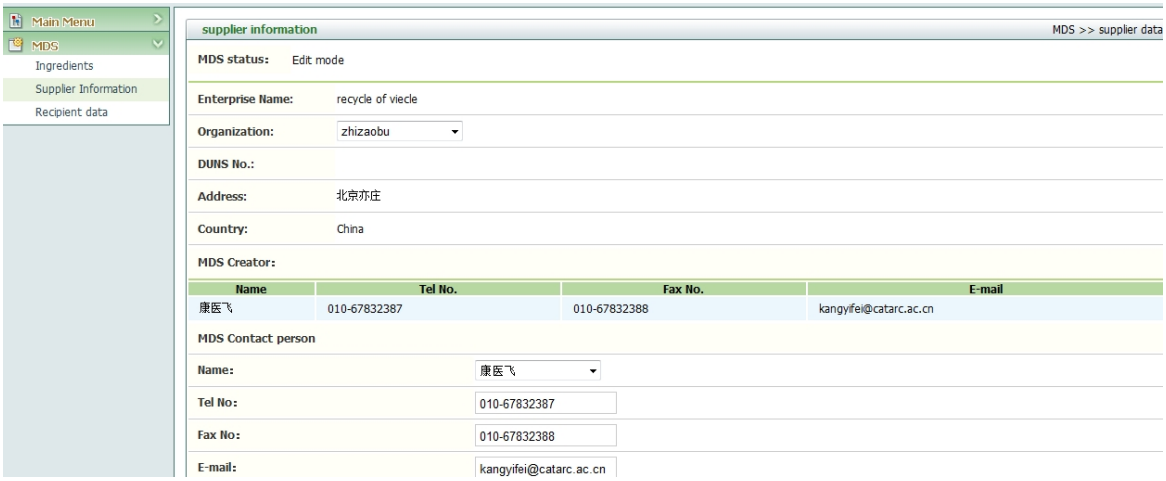
The self-built materials in CAMDS interface tool will be released automatically in the system after being uploaded and become independent MDS. As self-build ones, component and semi-component are still independent MDS after being uploaded.



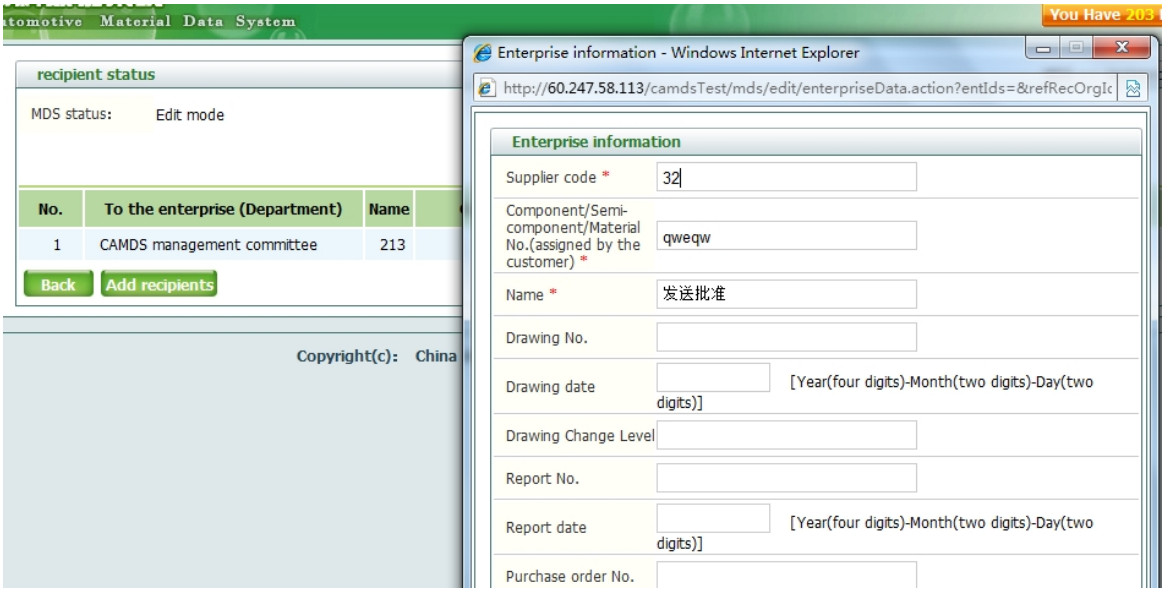
Check “Ingredients” after the exported file is uploaded.



Fill in “Organization” and “Name” in “Supplier information” before clicking “Next”.



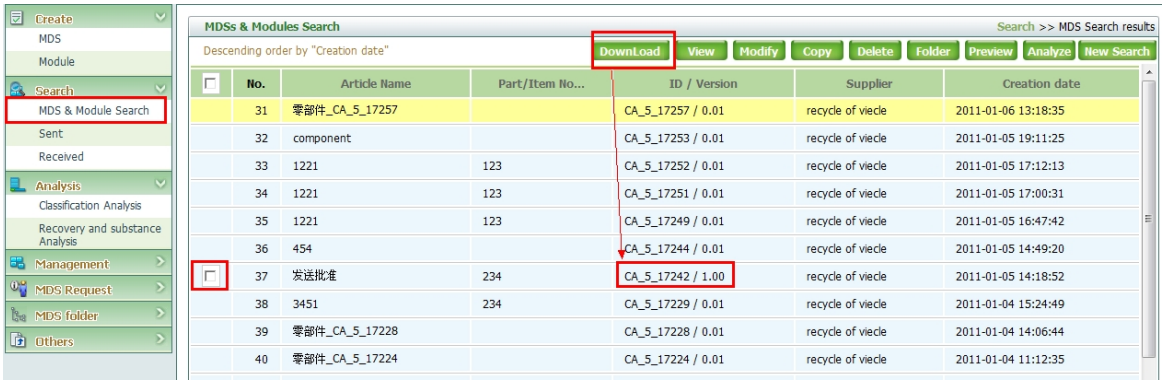
Assign value to “Enterprise information” after choosing “Add recipients”.



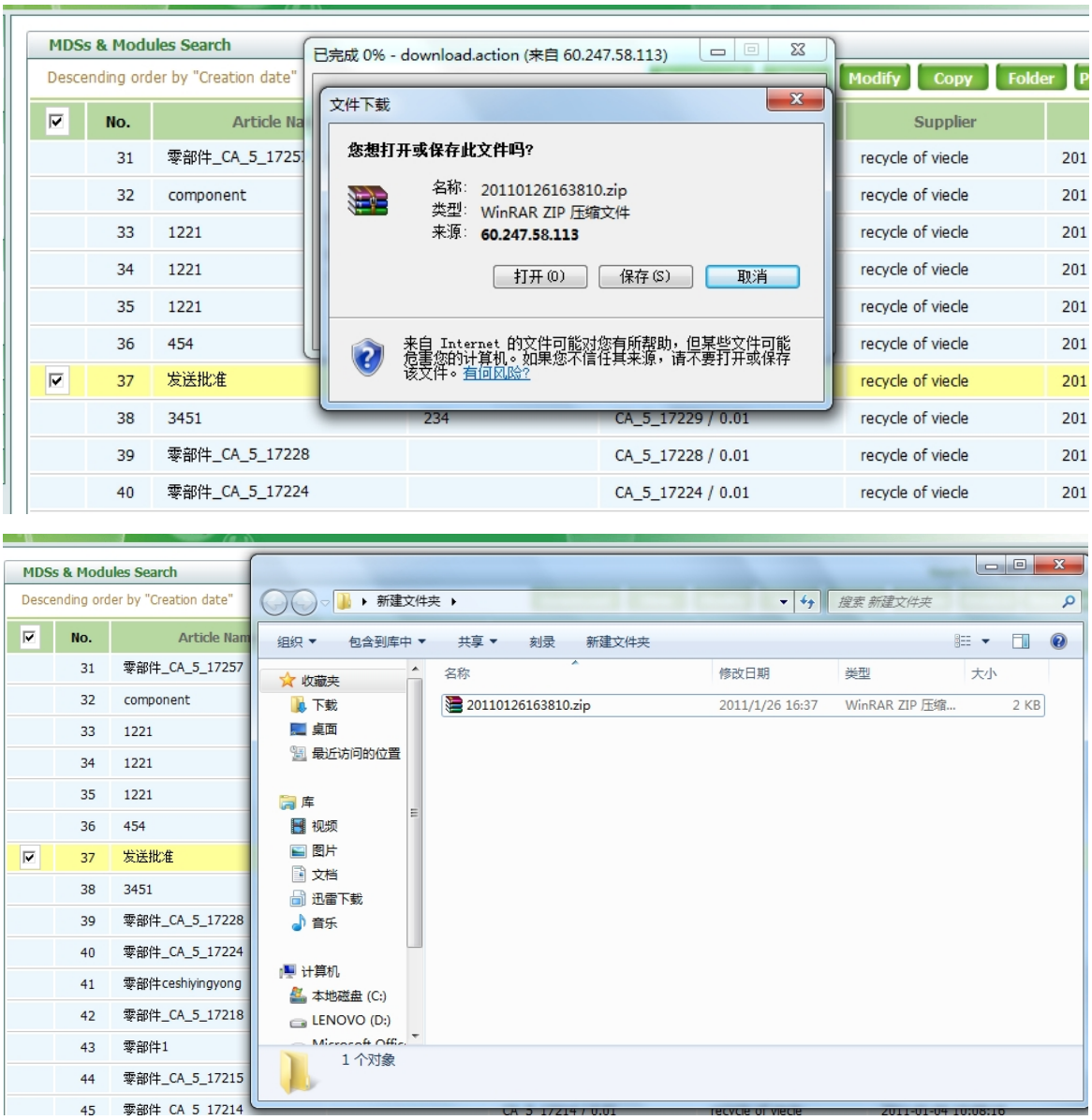
6 Sheet Download Methods and notes

6.1 Analysis on the download page

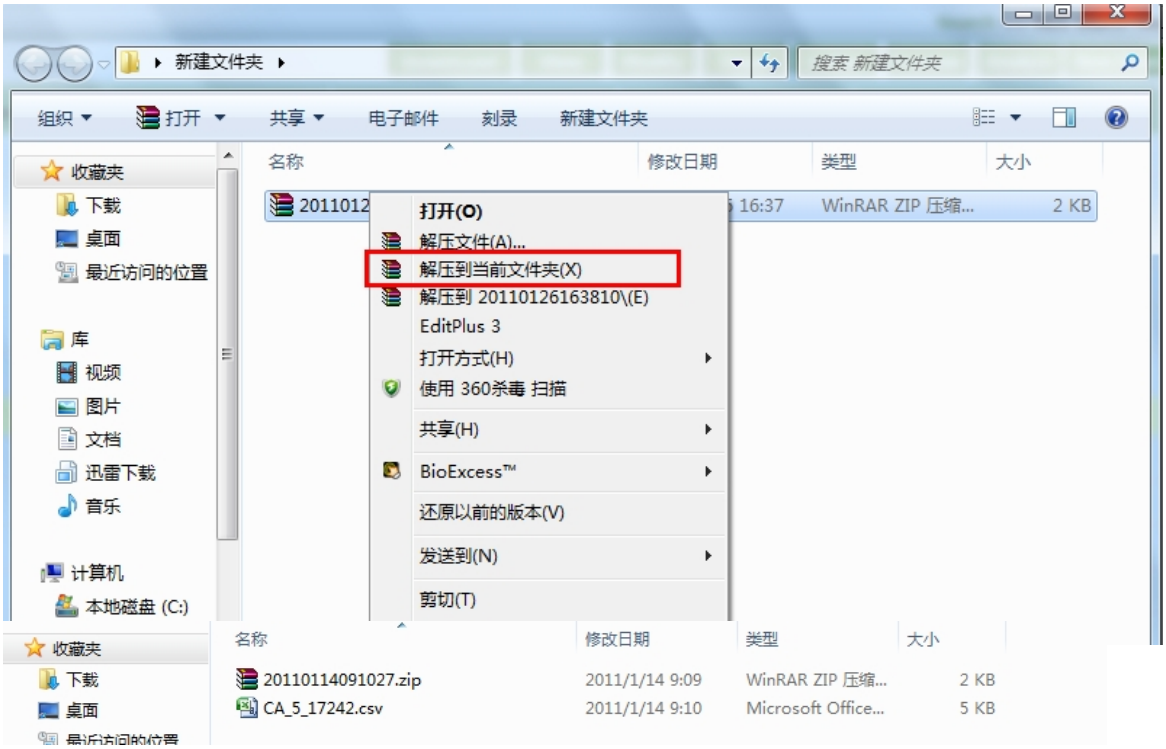
Users authorized by CATARC have the authority to download. The search result will be shown on the search page of "MDSs & Modules Search". Only the integral version of MDS has check box.



Check one or more check box, click "Download" to pop up file download dialog and choose download route after "Save". Every CSV has a correspondent MDS which is in the Zip file.



The format of downloaded file is ".Zip". Right click to unzip the file.



The name of CSV is the key ID of root node.

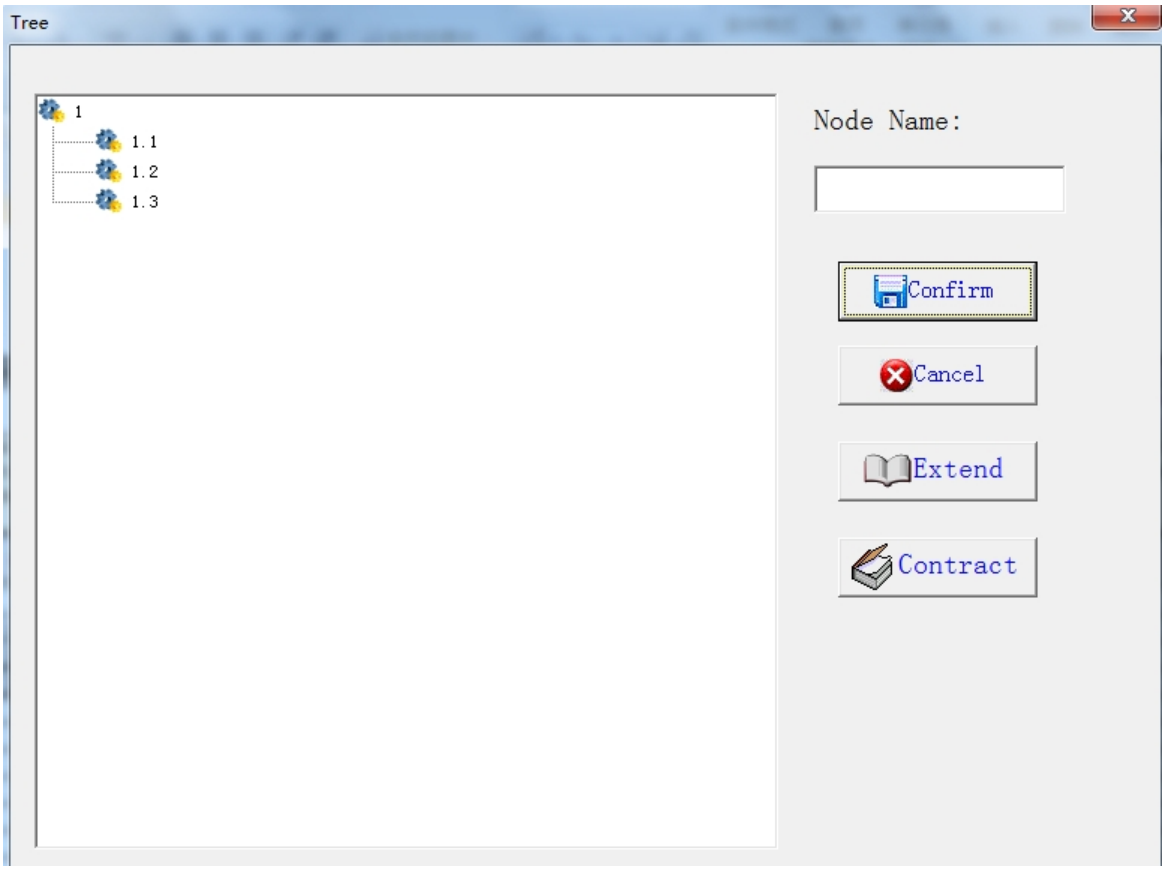
6.2 Downloaded CSV file format

The same as “4.2 - exported CSV file format”

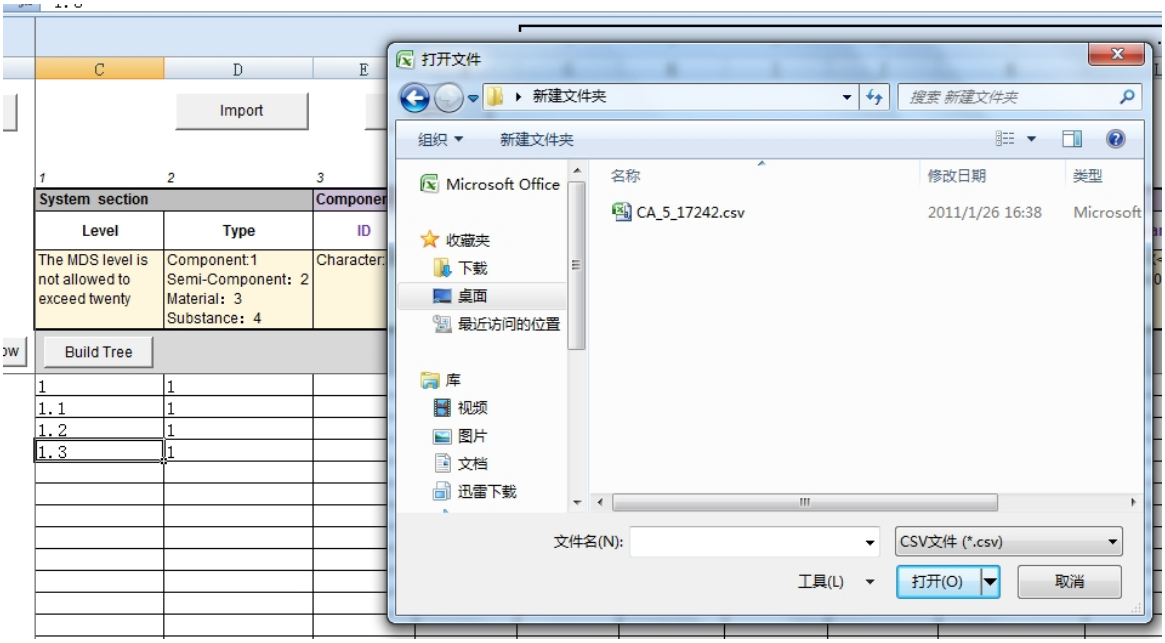
7 Sheet Import Methods and notes

7.1 The Sheet has the node which has been already generated

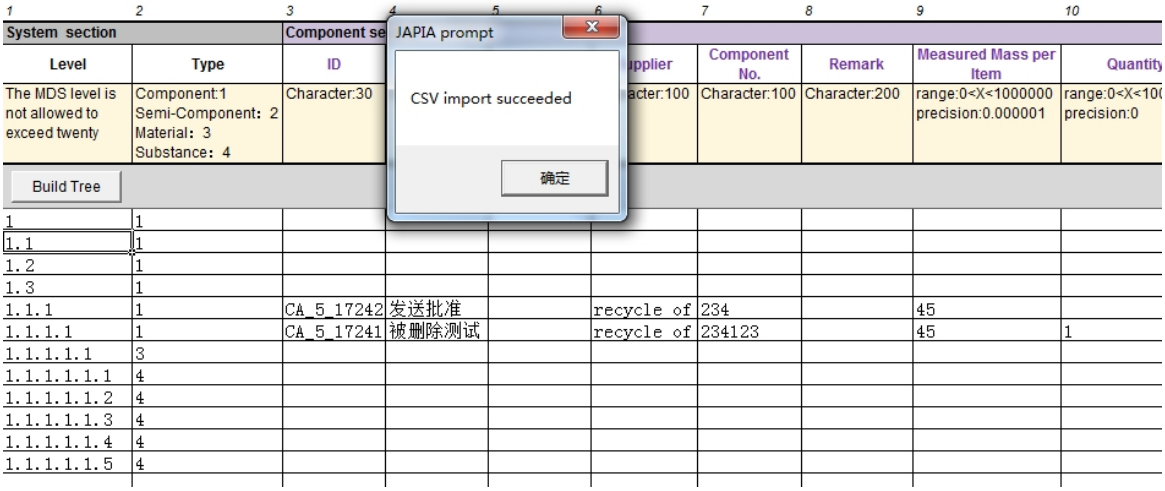
Click “Import” to pop up “Tree” dialog.



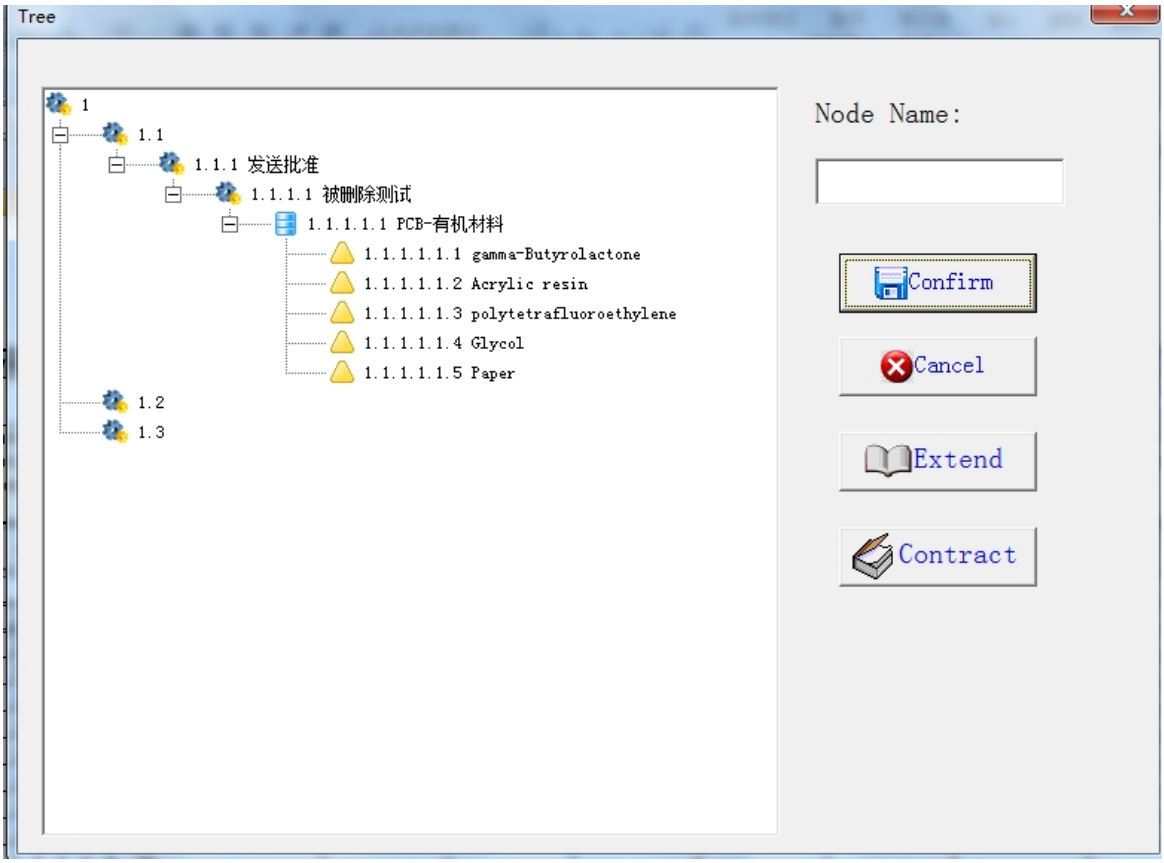
Choose node 1.1 in the tree structure to be imported; click “Confirm” to pop up import dialog.



Click “Open”. CSV file is imported into CAMDS interface tool.

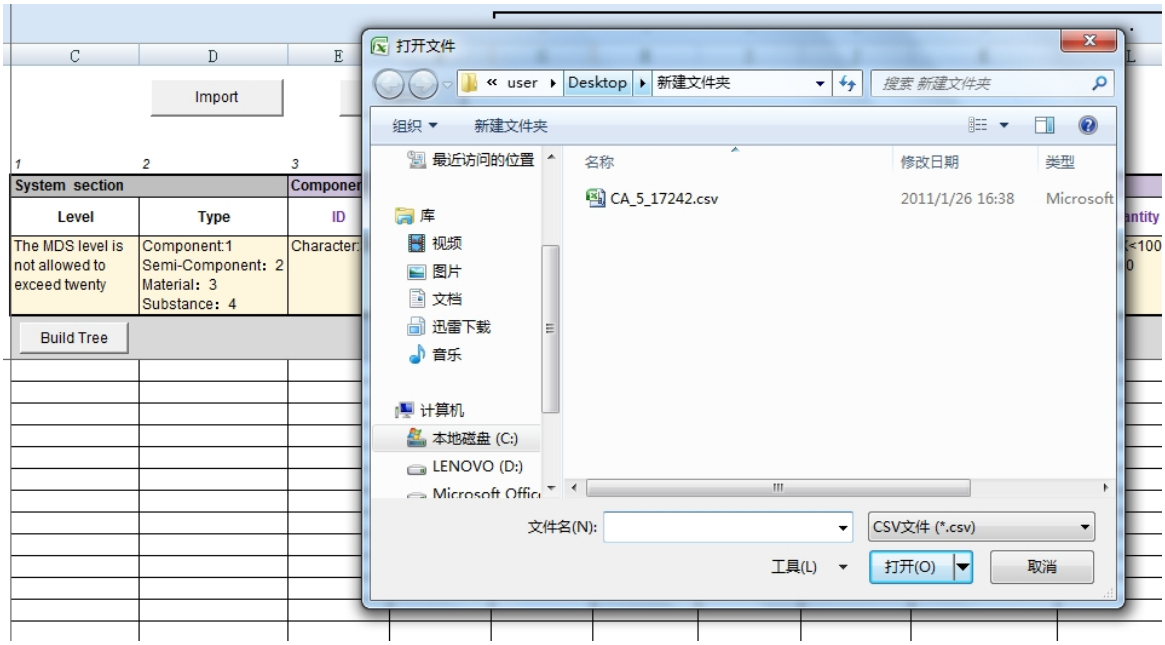


The imported CSV root node becomes the child node of node 1.1, and the tree structure is as follows:

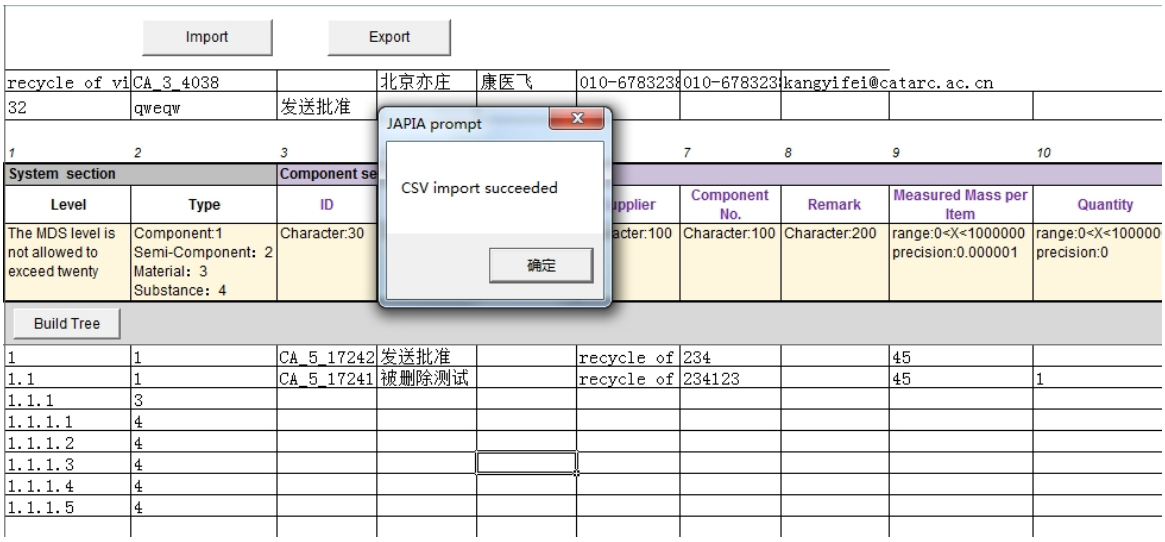


7.2 No data in the sheet

Click “Import” to pop up browsing box directly.



Select CSV to be imported, click “Open”. CSV is imported into CAMDS interface tool.



8 Conclusion

CAMDS interface tool developed by CATARC, it will be updated in a timely manner according to regulations and CAMDS updates.

Appendixes Ⅰ

Serial No	Checking Rules	Type
1	All the required items must be filled in	Error
2	The node checking rules shall be met	Error
3	All the numeric fields shall be number and meet the corresponding requirement of range and Precision level	Error
4	The nodes on the same level in a MDS tree shall be of the same type. Components and semi-components can not be at the same level	Error
5	It is not allowed to introduce MDSs (component, semi-component, material, basic substance) with the same ID under one node	Error
6	The sum of the content of confidential substance and wildcard substance cannot exceed 10% of the total material. The sum of the maximum cannot exceed10% of the total material.	Error
7	The sum of the child node proportion shall be 100%. When child node proportion is filled in with a range, the sum of the average of the range shall be 100%.	Error
8	The deviation between the measured value and the calculated value cannot exceed the tolerance.	Error
9	In a MDS tree, on the same level, Only one semi-component, one material or one basic substance could fill in “Rest" in proportion	Error
10	When introducing material of 5.1.x, 5.4.x or 5.5.1 type that is over 100 g or introducing materials of 5.2 or 5.3 type that is over 200g into a component, no entry of polymer mark for the component.	Error
11	An application must be selected for the material When: (1) a material containing Nullable/restricted substance is introduced into a component; (2) a material containing Nullable/restricted substance is introduced into a semi-component, then the semi-component is introduced into a component.	Error
12	Non-basic substance must be further decomposed. The lowest level of a MDS must be basic substance.	Error
13	When introducing material of 5.1.x, 5.4.x or 5.5.1 type that is over 100 g or introducing materials of 5.2 or 5.3 type that is over 200g into a component, the polymer mark is “No”.	Warning
14	The content of basic substance in a self-built material by a user exceeds the control limit. Proportion: X% ~ Y% Maximum Value: M= Y%－X% ; 0<=X<=7.5 M<=3 ;7.5<X<=20 M<=5; 20<X<=100 M<=10	Warning
15	When introducing a material into a semi-component, the range of proportion for the material exceeds the permissible range. (the range of the maximum share of material shall meet the following rule 0≤X≤100, M≤20)	Warning
16	The nodes on the same level in a MDS tree shall be of the same type. Components could be positioned as the same level as materials or semi-components and materials can be at the same level	Warning

Appendixes Ⅱ

Serial No	Checking Rules	Type
1	The node of the same level has already existed	Error
2	The parent node doesn’t exist	Error
3	The entry of "Level" is wrong	Error
4	The level exceeds the limit	Error
5	The node of the selected type is not allowed to be the parent node	Error
6	Nodes on the same level have to be of the same type	Error
7	No selection of the "type"	Error